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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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8: gb_pl:*
9: gb_pr:*
9: gb_pr:*
10: gb_sy:*
11: gb_sy:*
12: gb_sy:*
13: gb_un:*
14: gb_min:*
15: em_ba:*
16: em_fun:*
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26: em_ph:*
27: em_sts:*
28: em_htg_hum:*
29: em_htg_lnv:*
29: em_htg_lnv:*
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29: em_htg_other:*
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11028.050 Million cell updates/sec
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Copyright (c) 1993 - 2004 Compugen Ltd.
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number of results predicted by chance to have

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

TITLE	REFERENCE AUTHORS	SOURCE CRGANISM	ACCESSION VERSION	RESULT 1 AX702273 LOCUS DEFINITION		4 4 4 7		⊢ ⊢	۰,	ם מיטיג	37				100				25		22 18						1 13				ผน	i o	w	ກ ພ.4	ю	1	Result No. S
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and nucleic acids	R., Ellerman, K., Smit	Chordata; Craniata; Veri Primates; Catarrhini; H		1104 bp DNA 1 WO02064793.	ALIGNMENTS	Z94154	308577	116265	002761	000587					548931 1107225	270919	187417 375230	458308	004885	160155	548826 330753	308705	774793	270716	269382	704977	308611	33310	C052868	102718	470183	244735	230148	136961 016189			
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CAERRAFLLSLGATVALMNMNGGITFIIYFFASTHYRKWLLGIIKKKGSSSSSSSSS
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AX647101
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Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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                                                              h 70.6%;
Similarity 83.6%;
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                                                                                                                                                                                                                                    source
                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           On Apr 12, 2001 this sequence version replaced gi:13276997.
On Apr 12, 2001 this sequence version replaced from overlapping clones.

Where differences are found these are annotated as variations

together with a note of the overlapping clone name. Note that the

variation annotation may not be found in the sequence submission

corresponding to the overlapping clone, as we submit sequences with

only a small overlap as described above.

This sequence was finished as follows unless otherwise noted: all

regions were either double-stranded or sequenced with an alternate

chemistry or covered by high quality data (i.e., phred quality >=

30); an attempt was made to resolve all sequencing problems, such

as compressions and repeats; all regions were covered by at least

one plasmid subclone or more than one M13 subclone; and the

assembly was confirmed by restriction digest. The following

abbreviations are used to associate primary accession numbers given

in the feature table with their source databases: Em. EMBL; Sw:,

SWISSPROT; Tr. TREMBL; Wp:, WORMPEP; Information on the WORMPEP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (11-APR-2001) Sanger Centre, Hinxton, Cambridgeshire, CB10 1SA, UK. E-mail enquiries: humquery@sanger.ac.uk Clone requests: clonerequest@sanger.ac.uk
                                                                                                                                                                                                                                                                                                                                                                                                                                                            http://www.sanger.ac.uk/HGP/Chr13
RP11-178Cl0 is from the library RPCI-11.1 constructed by the group of Pieter de Jong. For further details see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AL136961 98861 k
Human DNA sequence from clone
                                                                                                                                                                                                                                                                            RP11-178C10 It may be shorter because we sequence overlapping sections only once, except for a 100 base overlap. The true right end of clone RP11-178C10 is at 98861 in this sequence. The true right end of clone RP11-461N23 is at 100 sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    http://www.sanger.ac.uk/Projects/C elegans/wormpep This sequence was generated from part of bacterial clone contigs of human chromosome 13, constructed by the Sanger Centre Chromosome 13 mapping Group. Further information can be found at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Blakey,S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     complete sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                       http://www.chori.org/bacpac/home.htm
VECTOR: pBACe3.6
                                                                                                                                                                                                                                                                                                                                                                                                   IMPORTANT: This sequence is not the entire insert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submission
    656. .723
/note="L2
                                                                                                                  /mol_type="genomic_DNA
/db_xref="taxon:9606"
/chromosome="13"
/clone="RP11-178C10"
                      /note="L1MB8 repeat: matches 5836. .6160
656. .723
                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                        /clone_lib="RPCI-11.1"
.61. .463
                                                                                                                                                                                                              organism="Homo sapiens"
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e RP11-178C10
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consensus" of consensus" is at 100 in this

overlapping of clone

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215. ,6548
note="Charliel repeat: matches 2292. ,2629 of consensus"
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"3491. .14076

"The consensus matches 2226. .2881 of consensus" matches 10. .17185

"Thote-"Link" repeat: matches 6237. .7151 of consensus" matches 10. .1718 of consensus" matches 10. .1718 of consensus" matches 10. .1718 of consensus" matches 10. .413 of consensus" matches 10. .413 of consensus" matches 1197. .7976 of consensus" matches 7197. .7976 of consensus" matches 7197. .7976 of consensus" matches 7197. .7976 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="LiM1 repeat: matches 5264. .5577 of consensus" 2181. .12626
note="Li repeat: matches 3474. .3949 of consensus" 254. .13012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5982. .26012
note="Tigger4(Zombi) repeat: matches 2701. .2731 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            :6005. .26208
'note="Tigger4(Zombi) repeat: matches 1772. .1970 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note="Alux repeat: matches 1. .297 of consensus" 2746. .28814 note="Lz repeat: matches 2574. .2643 of consensus" 3758. .23981
                                                                                                                                                       repeat: matches 2574. .2708 of consensus"
                                                                                                                                                                                                                      557, .6635
note="L2 repeat: matches 2128. .2206 of consensus"
                                                                                                                                                                                                                                                                                                                                                        893. .8994
note="L2 repeat: matches 1551. .1656 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  554. .9754
note="MER20 repeat: matches 33. .218 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="AluJb repeat: matches 85. .310 of consensus"
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5740, .25795
                                                                    note="L2 repeat: matches 1031. .1120 of consensus"
                                                                                                                                                                                                                                                                  730. .7233
note="L2 repeat: matches 1330. .1889 of consensus"
385. .2420
note="MIR repeat: matches 111. .146 of consensus"
                                                                                                           note="MER7A repeat: matches 2. .345 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               note="Mix repeat: matches 196. .251 of consensus" 5982. .26012
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note="AluSx repeat: matches 1. .305 of consensus"
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                                                                                                                                                                                                                                                                                                              301. .8499
note="MIR repeat: matches 17. .219 of consensus"
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/note="Tigger4(Zombi) repeat: matches 1. .1772 of
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mote="FAM repeat: matches 2. .165 of consensus"
0402. .10703
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'note="15 copies 2 mer ac 100% conserved"

6220. .35303

'note="2 copies 42 mer 97% conserved"

15667. .37274
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note="24 copies 2 mer at 75% conserved"
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/note="14 copies 2 mer aa 89% conserved"
41119. .41174
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note="6 copies 38 mer 86% conserved"
                                                                                                                                 700te="L2 rer
                                           .4646
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note="L1ME3A repeat: matches 5789. .6157 of consensus"
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/note="LlME3A repeat: matches 5301. .5782 of consensus"
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Anote="MIR repeat: matches 25. .250 of consensus"

46281. .4637 repeat: matches 1. .510 of consensus"

47886. .51275

Anote="Lilpa6 repeat: matches 2744. .6141 of consensus"

31364. .51523

Anote="MERSA repeat: matches 1. .189 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="AluSg/x repeat: matches 163. .300 of consensus"
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                                                                                                                                                                        12857. .43014

"Mote="12 repeat: matches 2553. .2733 of consensus"

13250. .43279

"note="15 copies 2 mer ca 100% conserved"

14262. .44708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note="MER21B repeat: matches 41. .789 of consensus"
4321. .54629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="MER69A repeat: matches 87. .176 of consensus"
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4/00te="L2 repeat: matches 1215. .1266 of consensus"
4/251. .42573
/note="MER?4A repeat: matches 2. .555 of consensus"
                                                                                                                                                                                                                                                                                         /note="MLTIC repeat: matches 1, .466 of consensus" 44860. .45175
/note="MLT2FB repeat: matches 1. .328 of consensus"
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58496. .58809
                                                               note="THEIC repeat: matches 58. .344 of consensus"
1791. .41842
                   note="AluSp repeat: matches 1. .309 of consensus" 1483. .41785
                                                                                                                                                                                                                                                                                                                                                         45204. .45235

/note="16 copies 2 mer tg 87% conserved"

45389. .45559

/note="MERSB repeat: matches 4. .175 of consensus"

46539. .45788

/note="MERSA repeat: matches 9. .184 of consensus"
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note="MSTE repeat: matches 86. .422 of consensus"
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1848. .52167
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1042 CAGGCCAGAGGTTCTATGTTCTTAGCGGAGCACGTGG 55784 CAGGCCAGAGGTTCTATGTTCTTAGCGGAGCACGTGG 1102 ACT 1104		Howo sapiens Bukaryota; Metazoa; Chordata; Craniata; Bukaryota; Metazoa; Primates; Catarrhin I (bases 1 to 1511/4) Birren, B., Linton, L., Nusbaum, C. and La Homo sapiens, clone RP11-23M9 Unpublished 2 (bases 1 to 1511/4)	Birren, B., Linton, L., Nuebaum, C., Lande Baldwin, J., Barna, N., Beckerly, R., Bogu Brown, A., Castle, A., Colangelo, M., Coll Cooke, P., DeArellano, K., Dewar, K., Domi Perreira, P., FirzHugh, W., Forrest, C., F Galagan, J., Gardyna, S., Cant, G., Hagos Howland, J.C., Johnson, R., Jones, C., Kan	Lehoczky, J., Latu, C., Locke, J., McJan McBwan, P., McGurk, A., McKernan, K., McLa Morrow, J., Naylor, J., Norman, C.H., O'Co Peterson, K., Pollara, V., Riley, R., Roy, Stange-Thomann, N., Stojanovic, N., Subra Tesfave, S., Tirrell, A., Vassiliev, H., V.	Wyman, D., Ye, W.J., Zimmer, A. and Zody, M. Direct Submission Submitted (23-NOV-1999) Whitehead Instignment of the Search, 320 Charles Street, Cambridge	On Ull 13, 200, LIES BEGUELED. All repeats were identified using Repeats Smit, A.F.A. & Green, P. (1996-1997) http://ftp.genome.washington.edu/RM/Rep	Center: Whitehead Institute/ MIT Ce Center code: WISH Web site: http://www-seq.wi.mit.edu Contact: sequence submissions@genom 	Center clone name: 23_M_9	* and the order in which they appear is * arbitrary. Low-pass sequence sampling * identifying clones that may be gene-: * overlap relationships among clones to * However, it should not be assumed the * will be sequenced to completion. In ' * the record is updated, the accession	* be preserved. 1 851; contig of 851 bp 852 951; gap of 100 bp 952 1804; contig of 853 bp 1805 1904; gap of 100 bp 1905 2719; contig of 815 bp	2819: gap or
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Sequence 64 from Patent W00166750.
AX244735 GI:15859614
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Pred. No. 7.7e-71;
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    /organism="Homo sapiens"
    /mol_type="unassigned DNA"
    /db_xref="taxon:9606"

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Sequence 35 from Patent WO0162797.
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Strem, B. Lintcon, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M., Baldwin, J., Barna, N., Beckerly, R., Boguslavkiy, L., Boukhgalter, B., Baldwin, J., Barna, N., Colangelo, M., Collins, S., Collymore, A., Cooke, P., DeArellano, K., Colmono, M., Donalan, L., Doyle, M., Ferreira, P., FitzHugh, W., Forrest, C., Hagos, R., Gage, D., Galagan, J., Gardyna, S., Grant, C., Hagos, B., Haeford, A., Horton, L., Howland, J.C., Johnson, R., Jones, C., Kann, L., Karatas, A., Klein, J., Lehoczky, J., Lieu, C., Locke, K., Macdonald, P., Marquis, N., Morrow, J., Nordan, C.H., O'Connor, T., O'Connor, T., O'Connor, T., Peterson, K., Pollara, V., Riley, R., Santos, R., Severy, P., Stanger-Thomann, N., Stringer, T., Stojanovic, N., Subramanian, A., Talamas, J., Tesfaye, S., Tirrell, A., Vassiliev, H., Vo, A., Wheeler, J., Mu, X., Wyman, D., Ye, W. J., Zimmer, A. and Zody, M.

Direct Submission

Submitted (13-NOV-1999) Whitchead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA, 02141, USA
Ol Jul 13, 2000 this sequence version replaced gi:6939915.

All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RW/RepeatMasker:
                                                                                      linear HTG 13-JUL-2000
                            317 AGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGCTCT---TCCTCCTCCTCCTCC 261
  Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases to 151174)
Birren, B., Linton, L., Nusbaum, C. and Lander, E.
Homo sapiens, clone RP11-23M9
Unpublished
Cbases to 151174)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Center: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                       ACULE189 151174 bp DNA linear HTG 1
Homo sapiens clone RP11-23M9, LOW-PASS SEQUENCE SAMPLING.
AC016189
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* sequencing reads that have not been assembled into
* contigs. Runs of N are used to separate the reads
* and the order in which they appear is completely
* arbitrary. Low-pass sequence sampling is useful for
* identifying clones that may be gene-rich and allows
* overlap relationships among clones to be deduced.
* However, it should not be assumed that this clone
* will be sequenced to completion. In the event that
* the record is updated, the accession number will
* be preserved.
                                                                                                                                                                             1057 ATGITCTTAGCGGAGCACGTGGTCTAACGTGTCATTTGCTTTATGACT 1104
                                                                                                                                                                                                      200 ATGTICTTAGCGGAGCACGTGGTCTAACGTGTCATTTGCTTTATGACT 153
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Web site: http://www-seq.wi.mit.edu
Contact: sequence_submissions@genome.wi.mit.edu
------ Project Information
Center project name: L4399
Center clone name: 23_M_9
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951: gap of 100 bp
1804: contig of 853 bp in length
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HTG; HTGS PHASE0.
Homo sapiens (human)
Homo sapiens
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AC016189/c
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BX470183 162543 bp DNA linear HTG 04-AUG-2003
Danio rerio clone CH211-184M13, WORKING DRAFT SEQUENCE, 4 unordered
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Submitted (03-MG-2003) Wellcome Trust Sanger Institute, Hinxton,
Cambridgeshire, CB10 1SA, UK. E-mail enquiries:
zfish-helpssanger.ac.uk Clone requests: clonerequest@sanger.ac.uk
on Aug 4, 2003 this sequence version replaced gi:30424174.
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            GGAGGACCCAGTGACCAGCAGGAAAGGAC-GCCACTGGCGAGGCTGCCTGCTTACGCTGC
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HTG; HTGS PHASE1; HTGS DRAFT; HTGS_FULLTOP.
Danio rerio (zebrafish)
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Center code: SC
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Pred. No. 8.2e-62;
0; Mismatches 16;
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Matches 407; Conservative
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* NOTE: This is a 'working draft' sequence. It currently

Gaps

4

Indels

880

132714

940

132894

700

132834

820

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unpublished

Elicases 1 to 190588)

Birren, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Adderson, S., Barna, N., Bastien, V., Boquelavkiy, L., Boukhgalter, B., Anderson, S., Barna, N., Bastien, V., Boquelavkiy, C., Chang, J., Chang, J., Chang, J., Chang, J., Chang, J., Chang, J., Chock, A., Cooke, A., Cooke, P., Dekrellano, K., Dewar, K., Diaz, J.S., Dodge, S., Faro, S., Ferreira, P., Pitzhugh, W., Galagan, J., Garad-Pierre, N., Ginde, S., Gord, S., Goyette, M., Graham, L., Garad-Pierre, N., Ginde, S., Gord, S., Goyette, M., Graham, L., Garad-Pierre, N., Jones, C., Kamat, A., Karatas, A., Kells, C., Lakocque, K., Landers, T., Lehoczky, J., Levine, R., Litu, G., Maclean, C., Macdonal, P., Major, J., Marquis, N., Mathews, C., Macdonal, P., Major, J., Marquis, N., Mathews, C., Marathy, M., McEwan, P., McEwan, K., McPheeters, R., Meldrim, J., Mondon, C., Norman, C.H., O'Connor, T., O'Onnell, P., O'Neil, D., Oliver, J., Peterson, K., Phurkhang, P., Pierre, N., Pollara, V., Raymond, C., Retta, R., Raback, M., Riley, R., Ries, C., Schupback, S., Strauss, M., Subramanian, A., Taalamas, J., Tesfaye, S., Theodore, J., Viel, R., Vo, A., Wilson, B., Wix, Waman, D., Ye, W.J., Young, G., Zainoun, J., Zembek, L., Zimmer, A. and Zody, M.

Direct Submission

Al Submitted (33-MOV-2001) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA
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  133070 GACCTGGTCATCGAACGTGCATGGAGTTCTCCAATTTTGACAG---CAAGAGGATGGCCT 133014
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Mus musculus clone RP24-469E6, WORKING DRAFT SEQUENCE, 9 unordered
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 190588)
                                                                                                                                                                                                    132953 cchacaecegescheaethecaaechethaeaahegeceaagaaaacetrheaecaa
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                                                                                                   133013 ATGITCITCIGITGCCITGCGICALIGGGITTITCAIGCALIGGGACTIAITCITIGCI
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AC102718.3 GI:31745314
HTG; HTGS PHASE1; HTGS DRAFT; HTGS_FULLTOP.
Mus musculus (house mouse)
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                                                                TCATGGTCCTGGTGGCCTTTGCCATTGGC
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consists of 4 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
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106 5105: gap of 100 bp

541 101640: gap of 100 bp

641 156970: contig of 5530 bp in length

971 157070: gap of 100 bp

Location/Qualifiers
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/clone=lib="CHOR1-211"
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/octon=assembly_fragment:01046
fragment_chain:1
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5106. _101540
5106. _101540
fragment chain:1"
101641. _156970
fragment chain:2"
1016end:17
clone end:17
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Pred. No. 5.8e-43;
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/mol type="genomic DNA"
/db_xref="taxon:7955"
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Birren, B. Nusbaun, C., Lander, E., Abouelleil, A., Allen, N., Anderson, S., Arachchi, H.M., Barna, N., Bastien, V., Bloom, T., Anderson, S., Arachchi, H.M., Canarata, J., Chang, J., Choepel, Y., Boguslavkiy, L., Boukhgalter, B., Carma, B., Dekarellano, K., Collymore, A., Cock, A., Cocke, P., Corum, B., Dekarellano, K., Diaz, J.S., Dodge, S., Dooley, K., Dorris, L., Erickson, J., Faro, S., Ferreira, P., Fitzderald, M., Gage, D., Galagan, J., Gardyna, S., Graham, J., Grand, Pirre, N., Hafez, N., Hagopian, J., Gardyna, S., Hall, J., Hulme, W., Ilier, N., Johnson, R., Jones, C., Lindblad-Toh, K., Liu, G., Lui, A., Mabbitt, R., MacLean, C., Macdonald, P., Major, J., Manthews, C., McCarthy, M., Meddrim, J., Meneus, L., Mihova, T., Menga, V., Murphy, T., Naylor, J., O'Neil, D., Oliver, J., Peterson, K., Phunkhang, P., Pierre, N., Chuck, J., Schuback, R., Seaman, S., Severy, P., Smith, C., Spencer, B., Stange-Thomann, N., Stobba, M., Stubbs, M., Talamas, J., Tesfaye, S., Theodore, J., Topham, K., Travers, M., Vassillev, H., Venkataraman, V.S., Viel, R., Vo, A., Wilson, B., Wu, X., Wyasillev, H., Volng, G., Zalnoun, J., Zembek, L., Lamer, A., and Zody, M. Direct Submission.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (14-UN-2003) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Jun 14, 2003 this sequence version replaced g1:22381711.
All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
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Center: Whitehead Institute/ MIT Center for Genome Research
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Contact: sequence submissions@genome.wi.mit.edu
Contact: sequence submissions@genome.wi.mit.edu
Center project Information
Center project name: 119343
Center clone name: 469 E 6
Sequencing vector: plasmid; n/a; 100% of reads
Center clone program: plasmid; n/a; 100% of reads
Assembly program: Phrap; version 0.960731
Consensus quality: 187732 bases at least Q40
Consensus quality: 189732 bases at least Q30
Consensus quality: 1897429 bases at least Q20
Insert size: 183000; agarose-fp
Insert size: 183000; agarose-fp
Quality coverage: 10.2 in Q20 bases; sum-of-contigs
Quality coverage: 9.9 in Q20 bases; sum-of-contigs
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430: gap of 100 bp
1070: contig of 540 bp in length
1070: contig of 672 bp in length
7799: contig of 672 bp in length
16242: gap of 100 bp
161242: gap of 100 bp
29388: contig of 13146 bp in length
49346: gap of 100 bp
49346: gap of 100 bp
49346: gap of 100 bp
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/note="aggembly_fragment"
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Collymore, A., Cook, A., Cooke, P., Corum, B., DeArellano, K., Diaz, J.S., Dodge, S., Dooley, K., Dorris, L., Erickson, J., Faro, S., Ferrelara, D., Flizderand, M., Gagagan, J., Gardagan, J., Grand-Pierre, M., Hafez, N., Hagopian, D., Hagos, B., Hall, J., Horton, L., Hulme, W., Iliev, I., Johnson, R., Jones, C., Kamat, A., Katatas, A., Kalls, C., Landers, T., Levine, R., Machan, C., Lind, M., Manning, J., Matthews, C., McCarthy, M., Meldrim, J., Maneus, L., Mihova, T., Matthews, C., McCarthy, M., Mencus, L., Mihova, T., Mlenda, V., Norol, R., Norbu, T., O'Donnell, P., O'Neil, D., Oliver, J., Peterson, R., Phunkhang, P., Pierre, N., Ramasamy, U., Raymond, C., Retta, R., Rasasamy, U., Raymond, C., Retta, R., Schauer, S., Schupback, R., Seaman, S., Schupback, R., Seaman, S., Schupback, R., Seaman, S., Schupback, R., Stange-Thomann, N., Stojanovic, N., Stubbs, M., Talamas, J., Tesfaye, S., Theodore, J., Topham, K., Travers, M., Vassillev, H., Venkataraman, V.S., Viel, R., Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Young, G., Zainoun, S., Zamer, S., and Zody, M., Direct, Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (25-NOV-2003) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Nov 25, 2003 this sequence version replaced gi:37777380. All repeats were identified using RepeatMasker: Smit, A.F.A. & Green, P. (1996-1997) http://ftp.genome.washington.edu/RM/RepeatMasker.html
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Center: Whitehead Institute/ MIT Center for Genome Research
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This sequence will be replaced
by the finished sequence as soon as it is available and the accession number will be preserved.

1 169489 169588 gap of 100 bp
168589 204438: contig of 100 bp
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                                                                                                                                                                   107860 AATCTGGTGAACAAAAAGGCTCTCAACACAATTATCCTCATTGTCGTGTTCATCC 107919
                                                                                                                                                                                                                                                                                                            107800 GTTACTCTCAGATCTGCTGCTACAACTCTTCAGGACTGCCAAGCAGAACCCACTCACGAGA 107859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             107980 CTGGAGCCCTGGAGTGTGGGGCGAGACATTCCTTCCAGATCTCTCTGCACTTCACGGTGT 108039
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Mus musculus chromosome 14 clone RP23-25708 map 14, *** SEQUENCING
IN PROGRESS ***, 2 ordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                           821 TGCCATCC-----TGTGCCGAGCGGAGGCTTTCTTACTGTCCCTTCAGGCCACCGTGG 874
                                                                                          701 GGAAAGGACGCCACTGCCTGCTTACGCTGCTGATGCTGGTGGCCGTGGTGGTGGT
                                                                                                                                                                                                                                                     761 TCTGCTTCAGCCCCTACCACCTCAACATCAAGCAGTTCATGGCGAGAGGGATGCTCCACC 820
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Anderson,M., Arachchi,H.M., Barna,N., Bastien,V., Bloom,T.,
Boguslavkiy,L., Boukhgalter,B., Camarata,J., Chang,J., Choepel,Y.,
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Mammalia; Eutheria; Rodentia, Sciurognathi, Muridae; Murinae; Mus.
1 (bases 1 to 204438)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         108160 TGAGGTCAGCCCTGAAGAATTCGCGGGAATGACA 108197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AC110249.9 GI:38502441
HTG: HTGS PHASE2; HTGS FULLTOP; HTGS_ACTIVEFIN.
Mus musculus (house mouse)
Mus musculus
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Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 112 Row: o Column: 14
This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF analysis, Similarity but not identity to protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: nisc mgo@nhgri.nih.gov
Akhter,N., Ayele,K., Beckstrom-Sternberg,S.M., Benjamin,B.,
Blakesley,R. w., Bouffard,G.G., Breen,K., Brinkley,C., Brooks,S.,
Blakesley,N. w., Bouffard,G.G., Breen,R., Brinkley,C.,
Hansen,N. L., Granite,S., Guan,X., Gupta,J., Haghighi,P.,
Hansen,N., Ho,S.-L., Karlins,E., Kwong,P., Laric,P., Legaspi,R.,
Maduco,Q.L., Masiello,C., Maskeri,B., Mastrian,S.D., McCloskey,J.C.,
McDowell,J., Pearson,R., Stantripop,S., Thomas,P.J., Touchman,J.W.,
Tsurgeon,C., Vogt,J.L., Walker,M.A., Wetherby,K.D., Wiggins,L.,
Young,A., Zhang,L.-H. and Green,E.D.
Abramson.R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,
McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,
Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W.,
Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S.,
Banchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,
Boutfard,G.G., Blakesley,R.W., Toucheman,J.W., Green,B.D.,
Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schuutz,J., Myers,R.M.,
Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smallus,D.E.,
Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
I Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
Submitted (27-MAY-2003) National Institutes of Health, Mammalian
Submitted (27-MAY-2003) Cancer Genomics Office, National Cancer
Gene Collection (MCC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Drs. Dennis Taub, Dan Longo (NIA, USA),
Tissue Procurement: Drs. Dennis Taub, Dan Longo (NIA, USA),
Conathan Keller (NCI, USA)
CDNA Library Preparation: Yulan Piao and Minoru Ko (Nationa)
Institute on Aging, NIH: http://lgaun.grc.nia.nih.gov/cDNA/)
DNA Sequencing Day: The I.M.A.G.E. Consortium (LLML)
Sequencing Center (NISC),
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(Lin-/c-Kit-/Sca-1+), mouse, 10 wks"
/clone lib="NAM Mouse Hematopoietic Stem Cell
/lib-/c-Kit-/Sca-1+) cDNA Library (Long)"
/lab_host="DH10B"
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/protein_id="AAH52868.1"
/db_xref="GI:31127265"
/db_xref="LocusID:321019"
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'clone="MGC:60769 IMAGE:30073287"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaithersburg, Maryland;
Web site: http://www.nisc.nih.gov/
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strain="C57BL/6NCr"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160674 GTTACTCTCAGATCTGCTGCAAACTCTTCAGGACTGCCAAGCAGAACCCACTCACCGAGA 160733
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Erausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shemmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.P., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
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                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      701 GGAAAGGACGCCACTGGCGAGGCTGCCTGCTTACGCTGCTGATGCTGGTGGCCGTGGTGG 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCCATCC-----TGTGCCGAGCGGAGGCTTTCTTACTCTCCCTTCAGGCCACCGTGG 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              935 ACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCCTCCTCCTCCTCCT 994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
1 (bases 1 to 1493)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTATATGAAGATCACCTGGAAGCTGTGCACACACACTCGGGAGGACCCAGTGACCAGA
                                                                                                                               CCTACGGGGGGGTCTACCTCATGGCCTGTGAGCGTGGACCATTACCCAGCTGTGGTCT
                                                                                                                                                                                                                                                               401 GIGCCCACIGGGGCCCGCGCCTCCGCACGCTGGCCGCCCAGGCTGGTCTGCGTGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                      TCTGGACCTTGGTGCTGCTGCAGACGATGCCCTTGCTTGATGCCCATGACCAAGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGCTTCAGCCCCTACCACCTCAACATCAAGCAGTTCATGGCGAGAGGGATGCTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCATGGTCCTGGTGGCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGGATCATCCTGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160614 GGATTCTGCTCGGAGCCTGTCTGCTGGCTACGTGCTATCACAGTCATTCTCTGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            995 CCTCCTCCACCCCAGGAAAAGCTTCTTCAGAAACACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BC052868.1 GI:31127264
                                                                                                                                      341
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ORGANISM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
BC052868
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AC133310/c
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                                                                                                                                               LFRTAKONPLTEKSGVNKKALNTILLIVVFILCFTPYHVAIIOHMIKMLGSFGALEC
GARHSFQISLHFTVCLMNFNCCMDPFIYFFACKGYKRKVMKMLKRQVSVSISSAVRSA
PESSREMTESQMMIHSKASNGR"
                             NLAALVVIVONRKKINSTILYSMULVISDILETTALPTRIAYYALGEDMRIGDALGRV
TALVEYINTYAGVNFMTCLSIDRFFAVVHPLRYNKIKRIEYAKGVCLSVWILVFAQTL
PLELTPMSKEBGDKTTCMEYPNFBGTASLPWILLGACLLGYVLPITVILLCYSQICCK
/translation="MANNFTTPLATSHGNNCDLYAHHSTARVLMPLHYSLVFIIGLVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            202..984
//notes-n7rm_l; Region: 7 transmembrane receptor (rhodopsin
family) "transmembrane receptor (rhodopsin
/db_xref="CDD:pfam00001"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     401 GTGCCCACTGGGGCCCGCGCCTCCGCACGGCTGGCCGGGCCAGGCTGGTCTGCGTGGCCA 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              704 GTTACTCTCAGATCTGCTGCAAACTCTTCAGGACTGCCAAGCAGAACCAACTCACCGAGA 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101 CTCTGTTCTACACAGCCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTTTGCC 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             461 TCTGGACCTTGGTGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAGCCGC 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             581 TCATGGTCCTGGTGGCCTTTGCCATTGGCTTCTGTGGGGCCAGTGGGGATCATCCTGTCCT 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               701 GGAAAGGACGCCACTGGCGAGGCTGCCTGCTTACGCTGATGCTGGTGGCCGTGGTGG 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       761. TCTGCTTCAGCCCCTACCACCTCAACATCAAGCAGTTCATGGCGAGAGAGGGATGCTCCACC 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       161 TTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTGGCTG 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               224 reatterreaaakcagaaaaaardaacreaaccacrererreargaactregrea 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        284 TTTCTGACATCCTGTTTACCACAGCTTTACCACTCGGATAGCCTACTATGCGCTGGGCT 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281 CCAGCTGGCCTTTCGGCAAGGGCTCTGCAGGCTGACGCGTTTGTGTGCTCTACACCGACA 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            341 CCTACGGGGGGTCTACCTCATGCCTGTGTGAGCGTGGACCATTACCCAGCTGTGGTCT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        404 CGTACGCAGGTGTGAACTTCATGACTTGCTTGAGCATAGACCGCTTCTTCGCTGGGTGC 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         524 TCTGGATTCTGGTCTTTGCTCAAACACTGCCGCTGTTCCTCACCCCTATGTCTAAGGAGG 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       764 AATCTGGTGTGAACAAAAGGCTCTCAACACAATTATCCTCATCATTGTCGTGTTCATCC 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           824 igiecircacececraecaceaecearcareaecacareaecacaraaaaaraceeceee 883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        884 CTGGAGCCCTGGAGTGTGGGGGCGAGACATTCCTTCCAGATCTCTCTGCACTTCACGGTGT 943
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                344 TIGATIGGAGGATAGGIGATGCCCTGTGCCGGGTAACTGCTCTGGTGTTCTACATCATCAACA 403
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    221 TGTCTGACCTGCTGTTCACCGTGGCCTTACCGGGAAGGGTGGTGTTATGTGCTGGGCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 19.9%; Score 220; DB 10; Length 1493; Best Local Similarity 53.0%; Pred. No. 1.4e-34; Matches 497; Conservative 0; Mismatches 435; Indels 6;
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Nazny, D.Marie, M. Razker, M.Lee, Abramzon, S., Adame, C., Alder, J., Allen, H., Alsbrooks, S., Anin, A., Angulano, D., Anyalien, M. Alsbrooks, S., Anin, A., Angulano, D., Anyalen, H., Alsbrooks, S., Anin, A., Angulano, D., Bandaranake, D., Bander, M., Bacas, B., Baden, H., Balden, H., Bandar, D., Bandaranake, D., Bander, M., Barnetaed, M., Benahmed, F., Biswalo, E., Bandaranake, D., Bander, M., Barnetaed, M., Benahmed, F., Biswalo, E., Bandar, B., Brantell, M., Calderon, B., Cardenas, V., Carter, X., Cavazos, I., Casar, H., Center, A., Carderon, B., Cardenas, V., Carter, X., Cavazos, I., Casar, H., Center, A., Carderon, B., Devila, M., Davis, C., Coyle, M., Calderon, B., Dedrich, C., Coyle, M., Care, A., Dedrich, D., Deland, C., Derwell, R., Cox, C., Coyle, M., Canter, M., Cardenas, S., Dunn, A., Durbin, K., Duval, B., Baves, K., Brand, A., Garner, M., Gangere, C., Barn, C., Engen, C., Derger, C., Derger, C., Brand, C., Gorge, M., Garler, M., Gangere, C., Barn, C., Band, M., Garler, M., Gangere, C., Hadle, M., Baccotto, M., Gangere, M., Hande, M., Hande, M., Garler, M., Gangere, M., Hande, M., Manned, M., Marned, M., Gangere, M., Hande, S., Hadle, S., Hadle, S., Hadle, S., Hadle, S., Hadle, S., Hadle, S., Hadle, S., Hadle, S., Marche, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marned, M., Marner
                                                                                                                                                                                                                                                                                                                                                                          239344 bp DNA linear HTG 19-NOV-2002
Rattus norvegicus clone CH230-64N15, WORKING DRAFT SEQUENCE, 3
                                                                      935 ACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCCTCCTCCTCCTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia; Eutheria; Rodentia, Sciurognathi, Muridae; Murinae;
                                                                                                                                                          995 CCTCCTCCACCCCAGGAAAGCTTCTTCAGAAACACCA 1032
                                                                                                                                                                                                                            1064 TGAGGİCAGCCCTGAAGAGAGATÇGCGGGAAATGACA 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HTG; HTGS_PHASE1; HTGS_DRAFT; HTGS_FULLTOP.
Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AC133310.2 GI:25073688
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                                                                                                  misc_feature
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                                                                                                                                                                                                                    Baylor Plaza, Houston, TX 77030, USA

On Nov 19, 2002 this sequence version replaced gi:22771237.

The sequence in this assembly is a combination of BAC based reads and whole genome shotgun sequencing reads assembled using Atlas (http://www.hgsc.bcm.tmc.edu/projects/rat/). Each contig described in the feature table below represents a scaffold in the Atlas assembly (a 'contig-scaffold'). Within each contig-scaffold') within each contig-scaffold') within each contig-scaffold by sized gaps filled with Ns to the estimated size. The sequence may extend beyond the ends of the clone and there may be sequence contigs within a contig-scaffold that consist entirely of whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome table.
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NOTE: This is a 'working draft' sequence. It currently consists of 3 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                     Submitted (10-SEP-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA (bases 1 to 239344)
                                                                                                                                                                                  Submitted (19-NOV-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
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7 17466: gap of unknown length
7 228779: contig of 211313 bp in length
0 228879: gap of unknown length
0 239344: contig of 10465 bp in length.
Location/Qualifiers
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Center code: BCM
Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hggc-help@bcm.tmc.edu
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complement(12152. 13760)
                                                                                                                                             Rat Genome Sequencing Consortium.
Direct Submission
  2 (bases 1 to 239344)
Rat Genome Sequencing Consortium.
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/note="wgs_contig"
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                                             Direct Submission
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72449 AATCTGGTGTGAACAAAAGGCTCTCAACACGATCATCCTCATCATCGGCGTGTTCGTCT 72390
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Pred. No. 3.4e-32;
0; Mismatches 414;
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complement 7209286..210
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Best Local Similarity 53.0%;
Matches 473; Conservative C
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935 ACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCCTCCTCC 987

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12. I (Dases I to 244622).
12. MINION, D. MARIEL, MARIENDORES, J. Admin, A. Anguiano, D. Allen, H. Alsbrockes, S. Amin, A. Anguiano, D. Allen, H. Alsbrockes, S. Amin, A. Anguiano, D. Allen, H. Alsbrockes, S. Amin, A. Anguiano, D. Allen, H. Alsbrockes, S. Anguiano, D. Anguiano, D. Allen, H. Alsbrockes, S. Anguiano, D. Bandaranaike, D. Barter, M. Baratestead, M. Benshmed, F. Biswalo, K. Blair, C. Bucch, P. Burrell, K. Calderon, E. Carders, V. Carter, K. Cavazori, I. Ceasar, P. Carder, D. Soural, C. Carder, M. Carter, C. Davila, M. Cree, D. Soural, D. Davila, M. Davis, C. Darson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson, S. Derson,
                                                                                                                                                                  AC094739 244625 bp DNA linear HTG 09-MAY-2003 Rattus norvegicus clone CH230-5C8, *** SEQUENCING IN PROGRESS ***.
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Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae,
DRAFT; HTGS_ENRICHED
                                                                                                                                                                                                                                                                  AC094739.5 GI:30466566
HTG; HTGS_PHASE2; HTGS_DRAFT;
Rattus norvegicus (Norway rat)
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Weinstock, G. and Gibbs, R.A.
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VERSION
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DEFINITION
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Submitted (15-SEP-2001) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

3 (bases 1 to 244625)

8 Rat Genome Sequencing Consortium.

B. Rat Genome Sequencing Consortium.

5 Direct Submission

6 May-2003 Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

7 May 9, 2003 this sequence version replaced gi:22771707.

7 May 9, 2003 this sequence version replaced gi:22771707.

7 May 9, 2003 this sequence version replaced gi:22771707.

8 Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

7 May 9, 2003 this sequence version replaced gi:22771707.

8 Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

8 Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

8 Molecular and Human Genetics, Baylor College of Medicine and whole genome should be sequence contigs within a contigs within a contigs will be indicated in the feature should sequence only contigs will be indicated in the feature table.
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(see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html).

* NOTE: This is a 'working draft' sequence. It currently

* consists of 1 contigs. Gaps between the contigs

* are represented as runs of N. The order of the pieces

* is believed to be correct as given, however the sizes

* of the gaps between them are based on estimates that have

* provided by the submittor.

* This sequence will be replaced

* by the finished sequence as soon as it is available and

* the accession number will be preserved.

1 244625: contig of 244625 bp in length.
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mol_type="genomic DNA"
db_xref="taxon:10116"
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Center: Baylor College of Medicine
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/note="wgs_end_extension
clone_end:Sp6"
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note="clone_boundary
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complement[242705.
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Liaw,C.W., Behan,D.P. and Chalmers,D.T.
Non-endogenous, constitutively activated human protein-coupled
                                                                                                                                                                                      Query Match
Best Local Similarity 50.6%;
Matches 475; Conservative
   Unknown.
Unclassified.
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   Length
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Score 208.6; DB 2;
Pred. No. 3.4e-32;
0; Mismatches 414;
Query Match 18.9%;
Best Local Similarity 53.0%;
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RESULT 14
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Pred. No. 2.1e-27;
0; Mismatches 457;
Patent: US 6555339-A 77 29-APR-2003;
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/organism="unknown"
/mol_type="genomic DNA"
                         Location/Qualifiers
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935 ACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCCTCCTCCTCCTCCT
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
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Patent: EP 1286165-A 1 26-FBB-2003;
Pfizer Limited (BB); PFIZER INC. (US)
Location/Qualifiers
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/mol_type="unassigned DNA"
/db_xref="taxon:9606"
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Sequence 1 from Patent EP1286165.
AX704977
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February 21, 2004, 17:32:38; Search time 484 Seconds (without alignments) 9690.105 Million cell updates/sec
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Listing first 45 summaries
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	Description	Abs64723 cDNA enco	Adc86840 Human GPC	Aak76477 Human imm	Abk94922 Human nov	Aas78869 DNA encod	Aas98131 Human DNA	Aas42840 Human G P	Aas30791 Human cDN	Aas98111 Human DNA	Human	Human G-	Adc22596 Human G p	Epstein	Aav25491 cDNA for	Aca56681 Human sig	Ade84890 Farnesyl	Ade25635 Human cDN	Aaa30730 DNA encod	Adc22724 Human G p	Abz42660 Human EBV	Eosino		Ach23286 Human adu
SUMMARIES	ü	ABS64723	ADC86840	AAK76477	ABK94922	AAS78869	AAS98131	AAS42840	AAS30791	AAS98111	AAA30635	ACC48996	ADC22596	AAQ64126	AAV25491	ACA56681	ADE84890	ADE25635	AAA30730	ADC22724	AB242660	AAA52629	AAS98061	ACH23286
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ALIGNMENTS

New isolated G protein coupled receptor polypeptides and polynucleotides, useful in gene therapy, particularly for treating or preventing cardiomyopathy, atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer. G protein coupled receptor related protein; ss; gene; human; GPCR; cardiomyopathy; atherosclerosis; diabetes; cancer; stroke; von Hippel-Lindau syndrome; Alzhaimer's disease; tuberous sclerosis; hypercalcaemia; Parkinson's disease; Huntington's disease; cerbral palsy; epilepsy; Lesch-Nyhan syndrome; multiple sclerosis; ataxia-telangiectasia; leukodystrophy; addiction; anxiety; depression; pain; obesity; Crohn's disease; osteoporosis; haemophilia; asthma; inflammatory bowel disease, infertility; hypertension; scleroderma; arthritis; human immunodeficiency virus; autoimmune disease; HIV; 'n Kekuda Casman SJ, Bdinger SR, Bllerman K, Smithson G, Muralidhara P; infection; graft-versus-host disease. cDNA encoding human GPCR16 protein. ABS64723 standard; cDNA; 1104 BP 03-JAN-2001; 2001US-0259552P. 09-JAN-2001; 2001US-0260544P. 20-MAR-2001; 2001US-0277405P. 03-JAN-2002, 2002WO-US000056. (first entry) (CURA-) CURAGEN CORP. WPI; 2002-643487/69. P-PSDB; ABG32286. WO200264793-A2. Homo sapiens. 15-NOV-2002 22-AUG-2002. ABS64723; RESULT 1 ABS64723

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961 AAGCTCAAAGGGTCTTCCTCCTCCTCCTCCTCCTCCACCCAGGAAAGCTTCT 1020
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                                                                This invention relates to a new isolated G-protein coupled receptor (GPCRX) polypeptide sequence and the cDNA encoding it. The GPCRX polypeptide sequence and the cDNA encoding it. The GPCRX polypeptide sequence and the cDNA encoding it. The GPCRX ancleic cold and antibody specific to the protein are useful for treating, preventing or alleviating a GPCRX-associated disorder related to cell signal processing and metabolic pathway and alsorder related to cell signal processing and metabolic pathway modulation. The GPCRX polypeptide and mucleic acid are also useful for altered levels of GPCRX, particularly cancer. The GPCRX nucleic acid and polypeptide are especially useful in the manufacture of a medicament for the appendic or prophylactic applications for disorders associated with a berrant GPCRX expression or activity, e.g. von Hippel-Lindau syndrome, are disease, stroke, tuberous sclerosis, hypercalcaemia, contained as a sepecially useful in the manufacture of a medicament for the aberrant GPCRX expression or activity, e.g. von Hippel-Lindau syndrome, allengament stroke, tuberous sclerosis, hypercalcaemia, contained as addiction, anxiety, depression, pain, obesity, Crohn's lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia, lucyertension, scleroderma, haemophila, astehma, arthritis, human immundeficiency virus, autroimmune disease, infertility, hyman submundeficiency virus, autroimmune disease, infertility, bypertension, scleroderma, haemophila, astehma, arthritis, human immundeficiency virus, autroimmune disease, infertility, bypertension, scleroderma, haemophila, astehma, arthritis, human immundeficiency virus, autroimmune disease, infertility, by protein is useful in gene therapy for treating the above conditions to protein is useful in gene therapy for treating the above conditions to protein subplied, tissue typing, preventive medicine, and protein for a subject or protocomics. These are further used as hybridisation probes, in the fortened as a subject or secure and as an expense or a subject
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pharmacogenomics. These are also useful in developing powerful assay system for functional analysis of various human disorders, as well as in diagnostic applications. The present sequence represents the CDNA encoding a human G protein coupled receptor related protein (GPCR) of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481 CAGACGATGCCCTTGCTCTTGATGCCCATGACCAAGCCGCTGGTGGGCAAGCTGGCCTGC 540
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100.0%; Pred. No. 6.8e-254;
tive 0; Mismatches 0;
    Claim 9; Page 97; 252pp; English.
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                                                                                                  3779 Argeregeregregregreferregeregeeterageserenegascareaaganeare
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cytostatic; gene therapy; vaccine; metastasis; ds.
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04-FEB-2000; 2000US-0180628P.
02-MAR-2000; 2000US-018656P.
16-MAR-2000; 2000US-0186350P.
11-MAR-2000; 2000US-0186350P.
15-MAR-2000; 2000US-0198074P.
15-MAY-2000; 2000US-019812P.
19-MAY-2000; 2000US-0205515P.
26-JUN-2000; 2000US-0214886P.
30-JUN-2000; 2000US-021684FP.
30-JUN-2000; 2000US-0216886P.
30-JUN-2000; 2000US-0216886P.
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                                                                                     The invention relates to a novel polynucleotide encoding a guanosine triphosphate-binding protein coupled receptor (GPCR). A polynucleotide of the invention may have a use in gene therapy. The polynucleotide and polypeptide are useful for preparing a composition for treating a patient in need of increased or suppressed activity or expression of the guanosine triphosphate-binding protein coupled receptor. The polynucleotide sequences shown in ADC85548-ADC87616 encode GPCR's of the invention.
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             New polynucleotide, useful for preparing a composition for treating a patient in need of increased or suppressed activity or expression of the guanosine triphosphate-binding protein coupled receptor.
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                                                                                                                                                                                                                                                                          Score 779; DB 9; Length 4319;
Pred. No. 5.6e-176;
0; Mismatches 0; Indels 197; Gaps
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                                                                          SEQ ID NO 1293; 28pp; English
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Best Local Similarity 83.6%;
Matches 1006; Conservative
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(HUMA-) HUMAN GENOME SCI INC

Rosen CA, Barash SC, Ruben SM

WPI; 2001-483426/52.

Nucleic acids encoding human immune/hematopoietic antigen polypeptides, useful for preventing, diagnosing and/or treating cancers and metastasis.

Disclosure; SEQ ID NO 31289; 3071pp + Sequence Listing; English.

AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (1)
amino acid sequences given in AAM82170 to AAM91921. (1) have cytostatic
activity, and can be used in gene therapy and vaccine production. (1)
proteins and polynucleotides may be used in the prevention, diagnosis and
treatment of diseases associated with inappropriate (1) expression. For
example, they may be used to treat disorders associated with decreased
expression by rectifying mutations or deletions in a patient's genome
that affect the activity of (1) by expressing inactive proteins or to
supplement the patients own producetion of (3). Additionally, (1)
polynucleotides may be used to produce the secreted (1), by inserting the
purchial of the activity of (1) and culturing the cell and culturing the cell to express the
protein. (1) proteins and polynucleotides may be used to prevent,
diagnose and treat immune/haematopoietic-related diseases, especially
cancers and cancer metarsases of haematopoietic derived cells. AAK64703
to AAK807694 represent human immune/haematopoietic antigen genomic
sequences from the present invention. AAK54951 to AAK54950 and AAM82169

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CAGGCCACCGTGGCCCTCATGAACATGAACTGTGGCATTACCCC-ATCATTTACTTCTTT
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Yamazaki V, Ujwal ML,
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                                                                Gaps
                         Sequence 9409 BP; 2123 A; 2163 C; 2259 G; 2864 T; 0 U; 0 Other;
                                                                Indels 197;
                                              Length 9409;
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     represent sequences used in the exemplification of the
                                            Score 779; DB 4; L
Pred. No. 7.3e-176;
0; Mismatches 0;
                                              Query Match 70.6%;
Best Local Similarity 83.6%;
Matches 1006; Conservative
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1041 1570 1450 1510 1101 Human, gene; ss; inflammatory condition; shock; sepsis; immune response; cancer; wound healing; central nervous system disease; haematopoiesis; peripheral nervous system disease; amyotrophic lateral sclerosis; tendon; myeloid cell disorder; lymphoid cell disorder; platelet disorder; bone; cartilage; ligament; nerve tissue; ulcer; osteoporosis; osteoarthritis; bone degenerative disorder; periodontal disease; reperfasion injury; lung fibrosis; liver fibrosis; autoimmune disorder; bacterial infection; allergic condition; thrombolysis; thrombosis; coagulation disorder; 981 The invention relates to human novel polynucleotides and associated polypeptides. The polynucleotides and polypeptides are useful for treating inflammatory conditions such as arthritis, nephritis, Crohn's disease, ischaemia-repertusion injury, shock, sepsis, immume responses and cancer and for promoting wound healing. The sequences are used to induce the proliferation of neural cells and responsation of neural brain tissue, and are useful for the treatment of central and peripheral nervous system diseases and neuropathies, such as Alzheimer's disease, Parkinson's disease, Huntington's disease and amyotrophic lateral TCCTCCTCCTCCTCCTCCTCCACCAGGAAAGCTTCTTCAGAAACACCAAGTATCACC CAGGCCAGAGGTTCTATGTTCTTAGCGGAGCACGTGGTCTAACGTGTCATTTGCTTTATG 1391 GCATCCACCATTACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCC GCATCCACCCATTACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCC 'n Novel nucleic acids and polypeptides for diagnosis, treatment of inflammatory, autoimmune, nervous system, myeloid or lymphoid cell disorders, cancer and promoting wound healing. Wang 'n Wang Asundi V, Zhou P, RT; Claim 1; Page 403-404; 672pp; English.

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sclerosis. The sequences are involved in chemotactic or chemokinetic cativity, requisation of haematopoiesis, treatment of myeloid or lymphoid cell disorders and platelet disorders such as thrombocytopenia, regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth, tissue repair, healing of burns, incisions, ulcers, treatment of osteoporosis, osteoarthritis, bone degenerative disorders and periodontal disease. The sequences of the invention are also useful for gut protection or regeneration and treatment of lung or liver fibrosis, repertuation injury in various tissues, immune deficiencies and disorders including severe combined immunodeficiency (SCID), bacterial or fungal infections, autoimmune disorders eg. multiple solerosis and mysathenia gravis, allergic conditions used as asthma, thrombolysis or thrombosis and cosquiation disorders. Sequences ABK94890-ABK94982 represent human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98 GCTCTCTGTTCTACACAGCCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTTT 157
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Human, chromosome mapping, gene mapping, gene therapy, forensic, food supplement, medical imaging, diagnostic, genetic disorder; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA encoding novel human diagnostic protein #14673.
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                         involving aberrant protein expression or biological activity. The bolypeptide and polyunclochide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce orcher types of data and products dependent on DNA and amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic coding sequences of the invention. Note: The sequence data for this patent din not appear in the printed specification, but was obtained in ftp.wipo.int/pub/published_pct_sequences
(II). (I) and (II) are useful for treating disorders rotein expression or biological activity. The
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel G protein-coupled receptor polypeptides including galanin receptor polypeptides useful for identifying modulators that are useful for treating Alzheimer's disease, psoriasis, melanoma, multiple sclerosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to an isolated polypeptide encoded by a nucleic acid molecule that is at least 80% identical to the G protein-coupled (GPCR) polynucleotides included in the specification. Also included are probes based on the GPCR sequences (including antisense probes), a host cell comprising an expression vector comprising the GPCR sequence.
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18-MAY-2000; 2000US-0205945P.
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AAS42840 standard; cDNA; 536 BP

RESULT 7

antibodies raised against the polypeptides, and methods of identifying modulators of the polypeptides. The polypeptides are useful for identifying modulators compounds which function as modulators, activators, repressors, agonists or antagonists of the movel GPCR polypeptides of including the GAL4 polypeptide. The antibodies and nucleic acid probes as described above can be used to detect the presence of the polypeptides of an uncleic acids and are used to diagnose a variety of disease, of ascracin which GPCRs are involved e.g., Alzheimer's disease, anyotrophic lateral sclerosis, asthma, atherosalerosis, basal cell carcinoma, breast carcinoma, acardiomyopathy, chondrosarcoma, chronic obstructive pulmonary disease, Crohn's disease, depression, epilepsy, macular degeneration, lymphoma, melanoma, multiple sclerosis, rheumatoid arthritis, osteoporosis, Parkinson's disease, psoriasis, rheumatoid arthritis, schoporosis, Parkinson's disease, psoriasis, rheumatoid arthritis, schoporosis, parkinson's disease, psoriasis, rheumatoid arthritis, schizophrenia, ulcration, The probes and antibodies are also useful for disagnosing cognition and memory disorders, anorexia, hormonal release disorders, cardiovascular activity disorders, pain perception disorders, obesity, diabetes, Alzheimer's disease. Preferably, compounds that decrease or increase the expression of galanin receptor (GAL4) can be used to treat obesity, diabetes, hyperlipidaemia and stroke. The GPCR nucleic acid is useful for treating the above mentioned disorders by gene the invarion

Sequence 1001 BP; 190 A; 315 C; 311 G; 185 T; 0 U; 0 Other;

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53.8%; Score 594.4; DB 6; Length 1001; llarity 98.7%; Pred. No. 4.7e-132; Conservative 0; Mismatches 6; Indels 2;
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Sequences AAS42906-AAS42926 represent cDNA molecules and PCR primers for cDNA molecules encoding human G-protein coupled receptor (GPCR)

CDNA molecules encoding human G-protein coupled receptor (GPCR)

Color compounds which bind to GPCR polypeptides and in screening to identify compounds which bind to GPCR polypeptides and in screening to compounds that modulate GPCR activity. By screening a human subject for the presence of mutations in GPCR pNA, a GPCR-related disorder or a contract predisposition can be diagnosed. The sequences can also be used genetic predisposition can be diagnosed. The sequences can also be used to treatment and prevention of mental disorders such as schizophrenia, attention deficit disorder, anxiety, depression, dementia and bipolar disorder, neurological disorders such as Huntington's disease, can disease and Tourette's syndrome, metabolic disorders such as obesity, anorexia and type 2 diabetes, cardiovascular disorders such as thrombosis, myocardial infarction, cardiomyopathy and atherosclerosis, viral infections caused by HIV and cancers
                                                                                                                                      Human; G-protein coupled receptor; GPCR; mental disorder; schizophrenia; attention deficit disorder; anxiety; depression; bipolar disorder; ss; neurological disorder; Huntington's disease; dementia; obesity; anorexia; metabolic disorder; Parkhinson's disease; Tourette's syndrome; thrombosis; type 2 diabetes; cardiovascular disorder; myocardial infarction; cancer; cardiomyopathy; atherosclerosis; human immunodeficiency virus; HIV; viral infection; immunostimulant; neuroloptic; nootropic; tranquiliser; antidepressant; anorectic; PCR primer; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid encoding a new G-protein coupled receptor polypeptide for detecting receptor modulators that can treat mental disorders, such as schizophrenia, anxiety, depression, or obesity.
                                                                                                          Human G Protein-Coupled Receptor (GPCR) cDNA #35.
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23-FEB-2000; 2000US-0184303P.
23-FEB-2000; 2000US-0184305P.
23-FEB-2000; 2000US-0184397P.
23-FEB-2000; 2000US-0184397P.
02-MAR-2000; 2000US-0186457P.
09-MAR-2000; 2000US-0188064P.
13-MAR-2000; 2000US-0188064P.
23-JUN-2000; 2000US-02134344P.
23-JUN-2000; 2000US-0217369P.
11-JUL-2000; 2000US-0217369P.
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20-JUL-2000; 2000US-0218492P
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Vogeli G,
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                                     Ouery Match 36.0%; Score 397.2; DB 4; Length 536; Best Local Similarity 97.5%; Pred. No. 5.3e-85; Matches 435; Conservative 0; Mismatches 8; Indels 3
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Sequence 536 BP; 93 A; 166 C; 182 G; 95 T; 0 U; 0 Other;
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08-MAR-2000; 2000US-0187582P.
08-MAR-2000; 2000US-0187714P.
08-MAR-2000; 2000US-0187825P.
08-MAR-2000; 2000US-0187825P.
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                                          Query Match
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protein-coupled receptors termed nGPCR-x nGPCR-x polynucleotides, polypeptides, and modulators may be used in the traatment of diseases and conditions such as viral infections caused by HIV-1 (human immunodeficiency virus) or HIV-2, pain, cancers, metabolic and cardiovascular diseases and disorders (e.g., type 2 diabetes, obesity, anorexia, hypotension, myocardial infarction.

Approxia, pypotension, myocardial infarction, obsity, anorexia, hypotension, and disease, and psychotic and neurological disorders, including schizophrenia, migraine, major depression, anxiety, mental disorder, manic depression, and dyskinesias, such as Huntington's disease or Tourette's Syndrome and many other diseases and syndromes listed in the specification. nGPCR-x polymucleotides and polypeptides, well as nGPCR-x modulators, may also be used in diagnostic assays for such diseases or conditions. The present sequence encodes a G protein-coupled receptor of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Isolated nucleic acid molecules encoding G protein-coupled receptors termed noPCR-x, useful in the treatment and diagnosis of viral infections, cancers and mental disorders (e.g. Parkinson's disease and schizophrenia).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to novel isolated nucleic acid molecules
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08-MAR-2000; 2000US-0187829F.
08-MAR-2000; 2000US-0187830F.
08-WAR-2000; 2000US-01878374F.
08-WAR-2000; 2000US-0187928F.
08-WAR-2000; 2000US-0187929F.
08-MAR-2000; 2000US-0187929F.
08-MAR-2000; 2000US-0187930F.
08-MAR-2000; 2000US-0189930F.
                                                                                                                                                                                                                                                                                                                                          (PHAA ) PHARMACIA & UPJOHN CO
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                                                                                                                                                                                                                                                                                                                                                                                                              Wood LS;
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The invention relates to an isolated polypeptide encoded by a nucleic acid molecule that is at least 80% identical to the g protein-coupled (GPCR) polynucleotides included in the specification. Also included are probes based on the GPCR sequences (including antisense probes), a host cell comprising an expression vector comprising the GPCR sequence. The polypeptides, and methods of identifying modulators of the polypeptides, and methods of identifying modulators of the polypeptides, and methods of identifying modulators of antagonists of properties are useful for identifying modulator compounds which function as modulators, activators, repressors, agonists or antagonists of the polypeptides as including the GAL4 polypeptide. The antibodies and nucleic acid sud are used to detect the presence of the polypeptides of and mucleic acids and are used to detect the presence of the polypeptides and mucleic acids and are used to diagnose a variety of diseases or disorders in which GPCRs are involved e.g., Alzheimer's disease, or arctinoma, breast carcinoma, sathma, atheroscalerosis, basal cell carcinoma, breast carcinoma, adheroscalerosis, basal cell carcinoma, breast carcinoma, melanoma, multiple sclerosis, obstructive pulmonary disease, crohn's disease, georiasis, replacementario, lymphome, melanoma, multiple sclerosis and many other disease listed in the specification. The probes and antibodies are also useful for diagnosing cognition and memory disease, pain perception classes the expression of galanin receptor (GAL4) can decrease or increase the expression of galanin receptor (GAL4) chart decrease or increase the expression of galanin receptor (GAL4) can be used to treat obesity, diabetes, hyperlipidaemia and stroke. The GPCR
                                                                                                                                                                                                                                       Human; G protein-coupled receptor; GPCR; ds; GAL4; galanin receptor; Alzheimer's disease; amyotrophic lateral solerosis; asthma; atherosclerosis; baselma; amyotrophic lateral solerosis; asthma; atherosclerosis; basal cell carcinoma; breast carcinoma; cardiomyopathy; chondrosarcoma; chronic obstructive pulmonary disease; Crohn's disease; depression; epilepsy; macular degeneration; lymphoma; melanoma; multiple sclerosis; osteoarthritis; osteoporrosis; parkinson's disease; psoriasis; rheumatoid arthritis; schizophrenia; ulcerative colitis; tuberrolosis; cognition disorder; memory disorder; acradiovascular activity disorder; pain perception disorder; obesity; diabetes; obesity; diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel G protein-coupled receptor polypeptides including galanin receptor polypeptides useful for identifying modulators that are useful for treating Alzheimer's disease, psoriasis, melanoma, multiple sclerosis,
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                                                                                                                                                                                               Human DNA for potential G protein-coupled receptor #68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hyperlipidaemia; stroke; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; Page 83; 144pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (LIFE-) LIFESPAN BIOSCIENCES INC.
                                             AAS98111 standard; DNA; 330 BP.
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18-MAY-2000; 2000US-0205945P.
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                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                              12-MAR-2002
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                                                                                                AAS98111;
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RESULT 9
                          AAS9811:
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nucleic acid is useful for treating the above mentioned disorders by gene therapy techniques. The present sequence is a novel GPCR polynucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                 349 GGGGTCTACCTCATGGCCTGTGTGAGCGTGGACCATTACCCAGCTGTGGTCTGTGCCCAC 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             468
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     409 TEGGGCCCCGCCTCCGCACGCTGGCCGCCCAGGCTGGTCTGCGTGGCCATCTGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        469 TTGGTGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAGCCGCTGGTGGGGC
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                                                                                                                                                                                                                                                                                           0; Gaps
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                                                                                                                                                                                                                         Length 330;
                                                                                                                                                                                                                 Query Match 29.7%; Score 328.4; DB 6; Length 3 Best Local Similarity 99.7%; Pred. No. 1.3e-68; Matches 329; Conservative 0; Mismatches 1; Indels
                                                                                                                                                   Sequence 330 BP; 46 A; 101 C; 108 G; 75 T; 0 U; 0 Other;
                                                                                                                                                                                                             DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        649 AAGATCACCTGGAAGCTGTGCACACAGCT 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 AAGATCACCTGGAAGCTGGGCAGCACAGCT 330
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cc endogenous human orphan G protein-coupled receptors (GPCRs, AAY90643-AAY906377 and AAY90683-Y90687), and to DNA encoding them (AAA30709-A30743) and to DNA encoding them (AAA30709-A30743). The mutant proteins of the invention contain a mutation in a portion of the proteins of the invention contain a contain a postion of the proteins of intracellular loop 3 (IC3) and transmembrane domain 6 (TM6). A non-endogenous amino acid, X, cc is substituted for an endogenous residue in TM6 to form a sequence X-CC (AA)15-Pro. The endogenous amino acid is selected from Lys, His, Arg or Ala, and is preferably Lys, When the endogenous residue at this position is Lys, this residue is replaced by His, Arg or preferably Ala. The 15 amino acid stretch between the substituted amino acid and the Pro may be condegenous, non-endogenous, or a mixture of endogenous and non-endogenous containtuively active GPCRs are useful for identifying antagonists, and partial agonists for use as pharmaceutical capents. The mutant proteins are also useful in research settings for elucidating the roles of the receptors in normal and diseases and discoders associated with that receptors in normal and diseases and discoders associated with that receptors leacuse the novel mutant GPCRs are constitutively active, they can be used directly for screening of compounds without the need for endogenous ligands. The present sequence compounds without the need for endogenous ligands. The present sequence compounds without the need for endogenous ligands. The present sequence compounds without the seed for endogenous ligands. The present sequence compounds without the med for endogenous ligands. The present sequence compounds without the red for endogenous ligands. The present sequence compounds without the red for endogenous ligands. The present sequence compounds without the red for endogenous ligands. The present sequence compounds without the endogenous ligands and subjected to site-directed mutagenesis (5DM) to generate DNA encoding the present sequence compo
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Sequence 1086 BP; 314 A; 242 C; 206 G; 324 T; 0 U; 0 Other;

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                                                                                                               TTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTGGCTG
                                                                                                                                          164 TCATTGTTCAAAACAGGAAAAAATCAACTCTACCACCCTCTATTCAACAATTTGGTGA
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   DB 3; Length 1086;
Score 184.8; DB 3; Length
Pred. No. 4.1e-34;
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                                                                                                                                                                                              821 TGCCATCC-----TGTGCCGAGCGGAGGGCTTTCTTACTGTCCCTTCAGGCCACCGTGG
                                                                                                                                                                                                                                                             CTAATTTCCTGGAATGTAGCCAAAGACATTCGTTCCAGATTTCTCTGCACTTTACAGTAT
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704 AATCIGGIGIAAACAAAAGGCICICAACAAATIAITCIIAITAITGIIGITIGIIG
                                                              TCTGCTTCAGCCCCTACCACCTCAACATCAAGCAGTTCATGGCGAGAGGGATGCTCCACC
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/*tag= a
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(PFIZ ) PFIZER INC.
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also provides screening methods to identify agonists and antagonists for BBI2. Modulators of the receptor may find use in diagnosing or treating depression, anxiety-related discorders (e.g. panic), stress, Alzheimer's disease, stroke, inflammatory disorders (e.g. rheumatorid arthritis), eating disorders (e.g. anorexia) and obesity
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                                                                                                                                                                                                                                                                            tch 16.7%; Score 184.8; DB 7; Length 1086; sal Similarity 50.6%; Pred. No. 4.1e-34; 475; Conservative 0; Mismatches 457; Indel8 6;
                                                                                                                                                                                                               Sequence 1086 BP; 314 A; 242 C; 206 G; 324 T; 0 U; 0 Other;
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The invention relates to a method for treating a non-endogenous, constitutively active version of an endogenous human G protein-coupled creceptor (GPCR) that has a transmembrane-6 (TMG) region and an intracellular-3 (IC3) region, by substituting a specific amino acid in tracellular-3 (IC3) region, by substituting a specific amino acid in tracellular-1 (IC3) region with a different amino acid, and testing for constitutively active activity. The method is useful for creating a constitutively active version of an endogenous human GPCR that comprises a transmembrane for region and an intracellular loop 3 region. The altered human GPCR polypeptides are useful for screening test compounds for identification of inverse agonists or partial agonists of GPCR polypeptides, which may have berapentic uses. The altered GPCR may also be used in vivo or in viro in biological research. A nucleic acid encoding the altered GPCR may be used to create a transgenic animal expressing the altered GPCR. The method allows screening for compounds that modulate the activity of a human G protein-coupled receptor without the need for provision of a ligand for the receptor. This is particularly useful in allowing currently known. This sequence represents for which no ligand is currently known. This sequence represents convening a human GPCR polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Creating a constitutively active version of an endogenous human G protein coupled receptor (GPCR) comprises substituting a specific amino acid in the transmembrane-6 region with a different amino acid, and testing for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101 CTCTGTTCTACACACGCCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTTTGCC 160
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Pred. No. 4.1e-34;
0; Mismatches 457; Indels 6;
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                                                                                                                                                                                                                                                                                     Human, gene; se, G protein-coupled receptor; GPCR, transmembrane-6 region; TM6; intracellular-3 region; IC3.
1004 TGAAGTCAGCCCTGAAGAAAATTCACGTGAAATGACA 1041
                                                                                                                                                                                                                                                 Human G protein-coupled receptor cDNA #22.
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                                                                                                                          ADC22596 standard; cDNA; 1086
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al Similarity 50.6%;
475; Conservative
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14-APR-1998;
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Location/Qualifiers 34. .1119 7*trag= a /product= "Epstein Barr virus induced polypeptide.

93WO-US009636. 92US-00980518

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in enlarging, increasing RNA synthesis, expressing activation antigens and adhesion molecules, secreting IG and proliferating. Unlike antigens stimulated B lymphocytes, EBV infected B lymphocytes continue to proliferate (in vitro) as immortalised lymphocytes continue to of the similar effects of EBV and antigen, EBV induced genes are likely to include mediators of antigen induced B lymphocyte growth or differentiation. (Updated on 25-WAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                            DNA coding for Epstein Barr Virus induced (EBI) polypeptide(s) and antibodies to EBI1, 2 and 3 - useful for detecting EBV by hybridisation
Epstein Barr virus; EBV; induction; detection; diagnosis; lymphocytes; antigen; growth; differentiation; mediator; infectious mononucleosis;
                                                                                                                                                                                                                                                                                                                                                                                                      Claim 2; Page 56-58; 84pp; English
                                                                                                                                                                                                                                                   (BGHM ) BRIGHAM & WOMENS HOSPITAL.
                                                                                                                                                                                                                                                                             Birkenbach M, Kieff E;
                                                                                                                                                                                                                                                                                                         1994-200183/24.
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                                              Homo sapiens
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                                                                                                                                                                                                                                                                                         Gaps
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                                 Query Match
Best Local Similarity 50.6%; Pred. No. 4.8e-34;
Matches 475; Conservative 0; Mismatches 457; Indels 6;
Sequence 1643 BP; 509 A; 339 C; 285 G; 510 T; 0 U; 0 Other;
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1643

AAQ64126 standard; DNA;

(revised)
(first entry)

25-MAR-2003 03-FEB-1995 AAQ64126;

Epstein Barr

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977 ATAAGAGAAAGGTTATGAGGATGCTGAAACGGCAAGTCAGTGTATCGATTTCTAGTGCTG 1036
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557 AGGCTGAAAGGATTACAIGCATGGAGTATCCAAACTTTGAAGAAACTAAATCTCTTCCCT 616
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94US-00352678.
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P-PSDB; AAW53623.
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                                                                                                              The present sequence was used in the development of a novel method for assessing or monitoring foetal or placental development. The method comprises taking a maternal serum sample, and detecting the level or size of Epstein Barr virus (EBV) induced gene or protein 3 (EBI-3) to obtain a result, which can be compared to a control to assess or monitor foetal or placental development
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Assessing or monitoring foetal or placental development - comprises detecting the level or size of Epstein Barr virus induced nucleic acid protein in maternal serum samples.
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The invention relates to a combination which, comprises a number of polynucleotide probes comprising a sequence selected from one of the 1490 sequences mentioned in the specification. The combination is useful as an array element in a microarray for monitoring the expression of a number of target polynucleotides. The microarray is particularly useful in the diagnosts and treatment of cancer and immunopathology and neuropathology. The microarray is useful in diagnostical and carcinogenicity studies, discovery and development, toxicological and carcinogenicity studies, discovery and paramacogenomics. The microarray is also useful for monitoring progression of diseases and for developing sophisticated profiles for the effects of currently available therapeutic drugs. The combination is also useful for purifying a subpopulation of minas. The array can detect changes in expression in a large number of genes coding for different signaling pathway populations which can be used to diagnose target of diseases including cancer e.g. adenocarcinoma and leukaemia, immunopathise e.g. AIDS and asthma, neuropathise e.g. Alzheimer's disease and Parkinson's disease. The present sequence represents a polynucleotide probe of the invention. Note: The sequence represents a polynucleotide form part of the printed specification but was obtained in electronic
                                         ACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCCTCCTCCTCCTCCT 994
GCCTGATGAACTTCAATTGCTGCATGGACCCTTTTATCTACTTCTTTGCATGTAAAGGGT 976
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signalling pathway population, cancer, adenocarcinoma, leukaemia,
immunopathy, AIDS, asthma, neuropathy, Alzheimer's disease, microarray.
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Pred. No. 4.8e-34;
0; Mismatches 457;
ilarity 50.6%;
Conservative
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    Best Local Similarity
Matches 475; Conserv
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Search completed: February 21, 2004, 19:27:06 Job time : 494 secs

Score 184.8; DB 7; Length 1643

16.7%;

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February 21, 2004, 19:12:09; Search time 110 Seconds (without alignments) 5569.689 Million cell updates/sec
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Gapop 10.0 , Gapext 1.0
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Maximum DB seq length: 2000000000
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Sequence 77, Appl	3, 4	m	m	127	3, A		1482	31,	181	•	43,	43	43	43	Sequence 1, Appli	ć	'n	ě	Sequence 3, Appli	m M	'n	ý,	112	'n	Sequence 1, Appli	7,
	ID	US-09-170-496D-77	US-08-383-750-3	US-08-352-678-3	US-09-536-954-3	US-09-016-434-1279	PCT-US93-09636-3	US-09-170-496D-205	US-09-016-434-1482	US-09-170-496D-31	US-09-170-496D-181	US-09-016-434-1484	US-08-153-848-43	US-09-299-843A-43	US-09-088-337B-43	PCT-US93-11153-43	PCT-US95-07180-1	US-09-214-904-3	US-08-432-174A-1	US-08-147-592A-3	US-08-292-694A-3	US-08-148-708-3	US-08-759-848-2	US-08-148-708-6	US-09-016-434-1123	PCT-US95-09383-2	US-08-411-859-1	US-08-387-707-7
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& Query	Match	16.7	16.7	16.7	16.7	16.7	16.7	16.6	10.7	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	9.7	7.6	7.6	7.6	9. 5	o.	9.5	9.5	9.5	9.5	9.5
C	Score	184.8	184.8	184.8	184.8	184.8	184.8	183.2	CD.	112	112	112	112	112	112	112	112	106.8	106.8	106.8	106.8	105.4	105.4	105.4	105.4	105.4	105.2	105.2
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ALIGNMENTS

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APPLICANT: Behan, Dominic P.
APPLICANT: Chalmers, Derek T.
APPLICANT: Chalmers, Derek T.
APPLICANT: Liaw, Chen W.
TITLE OF INVENTION: No. 6555339-Endogenous, Constitutively Activated Human G Protein-
TITLE OF INVENTION: Receptors
FILE REFERENCE: AREN-0040
CURRENT APPLICATION NUMBER: US/09/170,496D
CURRENT PILING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 294
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101 CICTGITCIACACACCCTCCTGGTCTTCAGTGCCCTGGGAACATCCTTGCCCTTTGCC 160
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Similarity 50.6%; Pred. No. 3.4e-36;
75; Conservative 0; Mismatches 457; Indels 6;
                                             ; Sequence 77, Application US/09170496D
; Patent No. 6555339
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                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
CRGANISM: Homo sapiens
US-09-170-496D-77
                                                                                       GENERAL INFORMATION:
RESULT 1
US-09-170-496D-77
                                                                                                                                                                                                                                                                                                                                                                                           1086
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                  SEQUENCE CHARACTERISTICS:
LENGTH: 1643 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
   INFORMATION FOR SEQ ID NO:
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34..1116
                                                                                     TOPOLOGY: linear
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                                                                                                                , NAME/KEY;
, LOCATION;
US-08-383-750-3
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464 TCTGGATTCTAGTATTTGCTCAGACTCCCACTCCTCATCAACCCTATGTCAAAGCAGG 523
                                                 524 AĞGCTĞAAAGĞATTACATĞCATĞGAĞTATCCAAACTTTGAAGAACTAAATCTCTTCCT 583
                                                                                                                  581 TCATGGTCCTGGTGGCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCCTGTCCT 640
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Patent No. 5744301
GENERAL INFORMATION:
APPLICANT: Birkenbach, Mark
APPLICANT: Kieff, Elioc
TITLE OF INVENTION: Epstein Barr Virus Induced Genes
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/383,750
FILING DATE: Herewith
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ATTORNEY, AGENT INFORMATION:
NAME: Fox, Samuel, L.
REGISTRATION NUMBER: 30,353
REFERENCE/DOCKET NUMBER: 0627.3300001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
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16.7%; Score 184.8; DB 1; Length 1643; 50.6%; Pred. No. 4e-36; tive 0; Mismatches 457; Indels 6;
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700 736 760 796 820 856 874

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977 ATAAGAGAAAGGITATGAGGATGCTGAAACGGCAAGTCAGTGTATCGATTTCTAGTGCTG 1036
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APPLICANT: Birkenbach, Mark
APPLICANT: Kief, Elliott
TITLE OF INVENTION: EPSTEIN BARR VIRUS INDUCED GEN
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: ADDRESSE:
STREET: 600 Atlantic Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 02210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/536,954
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Patent No. 6500926
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COUNTRY: USA
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977 ATAAGAGAAAGGTTATGAGGATGCTGAAACGGCAAGTCAGTGTATCGATTTCTAGTGCTG 1036
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            crerecarracacercerenteareareacercerecaaaaacrracracerreeree 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TIACCIGICAAAAGAGCAGGAAGAICAACIGCACAGGCAICIACCIGGIGCACCIGGCTG 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               197 icarrericaaaacaeeaaaaaaarcaacreraceaeeereririraaraaarrideeaa 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 257 iritcitahahachrirhaktardetrirketracatetahahaktarahaktandetri 316
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Birkenbach, Mark
APPLICANT: Birkenbach, Mark
APPLICANT: Kieff, Elliott
TITLE OF INVENTION: EPSTEIN BARR VIRUS INDUCED GENES
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Wolf, Greenfield & Sacks, P.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM ILER FLOURY WILLS
COMPUTER: IBM PC COMPATIBLE
CORRATING SYSTEM: PC-DOS/MS-DOS
SOUTWARE: PACENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/352,678
FILING DATE: 30-NOV-1994
CLASSIETCATION: 435
PRIOR APPLICATION THEORY
APPLICATION NUMBER: US 07/980,518
FILING DATE: 25-NOV-1992
ATTONENY/AGENT INPOMPATION:
NAWE: GALES ED-NOV-1992
ATTONENY/AGENT INPOMPATION:
NAWE: GALES ED-NOV-1992
TELECOMMUNICATION INPOMPATION:
TELECOMMUNICATION INPOMPATION:
TELECOMMUNICATION INPOMPATION:
TELECOMMUNICATION INPOMPATION:
                                                                        CCTCCTCCACCCCAGGAAAGCTTCTTCAGAAACACCA 1032
                                                                                                                                     1037 TGAAGTCAGCCCTGAAGAAATTCACGTGAAATGACA 1074
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 184.8; DB
Pred. No. 4e-36;
                                                                                                                                                                                                                                                                                                        Sequence 3, Application US/08352678
Patent No. 6043351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Wolf, Greenfield
600 Atlantic Avenue
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Best Local Similarity 50.6%;
Matches 475; Conservative C
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1643 base pairs
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: double
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34..1116
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MOLECULE TYPE:
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LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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977 ATAAGAGAAAGGTTATGAGGATGCTGAAACGGCAAGTCAGTGTATCGATTTCTAGTGCTG 1036
101 CTCTGTTCTACACAGCCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTTTGCC 160
                                                                                                                                                                                                  875 CCCTCATGAACATGAACTGTGGCATTACCCCAATCATTTACTTTTGCATCCACCCATT 934
                                                                                                                                                                                                                                                     935 ACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCCTCCTCCTCCTCTT 994
                                                                                      821 IGCCAFCC-----TGTGCCGAGCGGAGCGCTTTCTTACTGTCCCTTCAGGCCACCGTGG 874
                                                                                                                                            857 CTAATÍTCCTGGAATGTAGCCAAAGACATTCGTTCCAGATTTCTCTGCACTTTACAGTAT 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Sellhamer
APPLICANT: Jeffrey J. Sellhamer
IITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
IITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
16.7%; Score 184.8; DB 4; Length 1643;
Best Local Similarity 50.6%; Pred. No. 4e-36;
Matches 475; Conservative 0; Mismatches 457; Indels 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MIDDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFWARE: Word berfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATE:
APPLICATION NUMBER: US/09/016,434
                                                                                                                                                                                                                                                                                                                                                                                                                       995 CCTCCTCCACCCCAGGAAAAGCTTCTTCAGAAACACCA 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1037 rgaagrcagcccrgaagaaarrcacgrgaaarrcaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : INCYTE PHARMACBUTICALS, INC
3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGIETRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-01
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (660) 845-4166
INFORMATION FOR SEQ ID NO: 1279:
SEQUENCE CHARACTERISTICS:
LENGTH: 1643 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: PALO ALTO STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; LIBRARY: GENBANK
; CLONE: 9292056
US-09-016-434-1279
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTACGGGGGGGGTCTACCTCATGGCCTGTGAGCGTGGACCATTACCCAGCTGTGGTCT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             401 GTGCCCACTGGGGCCCCGCGCCTCCGCACGCTGGCCGCCCAGGCTGGTTGCGTGGCCA 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            461 TCTGGACCTTGGTGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAGCCGC 520
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 581 TCATGGTCCTGGTGGCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCCTGTCCT 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    617 GGAİTCIGCİTIGGĞĞCAİGİTICAİAĞĞAİAIGIACITICCACİTATAAICAİTICİCAICİ 676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            641 GCTATATGAAGATCACCTGGAAGCTGTGCAGCACACACTGGGAGGACCCCAGTGACCAGCA 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            677 ściaircrcagarcrechdeaacrchreagaacrecaaacaaaaccacreacreaga 736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        701 GGAAAGGACGCCACTGGCGAGGCTGCCTGCTTACGCTGCTGATGCTGGTGGCCGTGGTGG 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              737 AATCTGGTGTAAACAAAAGGCTCTCAACAATTATTCTTATTATTATTGTTGTTGTTTTTTT 796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    761 TCTGCTTCAGCCCCTACCACCTCAACATCAAGCAGTTCATGGCGAGAGAGGATGCTCCACC 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161 TTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTGGCTG 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              197 TCATTGTTCAAAACAGGAAAAAATCAACTCTACCACCTCTATTCAACAAATTTGGTGA 256
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       377 CATÁTGCAGGTGTGAACTTTATGACCTGCTGAGTATTGACCGCTTCATTGCTGTGGTGC 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   437 ACCCTCTACGCTACAAGATAAAAAGGATTGAACATGCAAAAGGCGTGTGCATATTTG 496
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16.7%; Score 184.8; DB 4; Length 1643; 50.6%; Pred. No. 4e-36; tive 0; Mismatches 457; Indels 6;
                       CLASSIFICATION:
PRIOR APPLICATION:
APPLICATION NUMBER: 08/352,678
FILING DATE:
ATTORNEY,AGENT INFORMATION:
NAME: Gates, Edward R.
REGISTRATION NUMBER: 31,616
REPERENCE/DOCKET NUMBER: B0801/7044
TELECOMNUMICATION INFORMATION:
TELEPHONE: 617-720-3500
TELEFAX: 617-720-241
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 1643 base pairs
TYPE: nucleic acid
STRANDENESS: double
TOPCLOGY: linear
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: CDS
LOCATION: 34..1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Sim:
Matches 475;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-536-954-3
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g ઠે 셤 ò g à 占 ò 셤 δ g à g à 면 δ 임 ò ઠ a SUFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNUMBER: PCT/US93/09636
FILING DATE: herewith
TELROMANNIAN:

STATE: D.C.
COUNTRY: U.S.A.
ZIP. 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

Washington

us-10-041-615-33.rni

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TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2540
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 1643 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY:
LOCATION:
PCT-US93-09636-3
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TYPE: nucle STRANDEDNESS

TOPOLOGY: linear

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317 TTGACTGGAGAATGGCGTTGTGTAGGATAACTGCGCTAGTGTTTTACATCAACA 376
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Length 1643;
                                     0; Mismatches 457; Indels
.8; DB 5;
4e-36;
Score 184.8;
Pred. No. 4e-
16.7%;
50.6%;
  Query Match
Best Local Similarity 50.6<sup>†</sup>
Matches 475, Conservative
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RESULT 6
PCT-US93-09636-3
; Sequence 3, Application PC/TUS9309636
; Sequence 3, Application PC/TUS9309636
; Sequence 3, Application:
; APPLICANT: Birkenbach, Mark
; APPLICANT: Kieff, Elliot
; TITLE OF INVENTION: Epstein Barr Virus Induced Genes
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:

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                                                                       464 TCTGGATTCTAGTATTTGCTCAGACACTCCCACTCATCAACCCTATGTCAAAGCAGG
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Sequence 1482, Application US/09016434

Sequence 1482, Application US/09016434

Patent No. 650038

GENERAL INFORMATION:
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Sellhamer
APPLICANT: Jeffrey J. Sellhamer
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        995 CCTCCTCCACCAGGAAAAGCTTCTTCAGAAACACCA 1032
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APPLICATION NUMBER:
FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: HEREWITH
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94304
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Sequence 205, Application US/09170496D
Sequence 205, Application US/09170496D
Sequence 205, Application US/09170496D
Patent No. 6555339
GENERAL INFORMATION:
APPLICANT: Chalmers, Derek T.
APPLICANT: Chalmers, Derek T.
APPLICANT: Liaw, Chen W.
TITLE OF INVENTION: No. 6555339-Endogenous, Constitutively Activated Human G Protein-TITLE OF INVENTION: No. 6555339-Endogenous, Constitutively Activated Human G Protein-TITLE OF INVENTION: NUMBER: US/09/170,496D
CURRENT APPLICATION NUMBER: US/09/170,496D
CURRENT FILING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 294
SOFTWARE: Patentin version 3.1
SEQ ID NO 205
LENGTH: 1086
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                                                                AATCTGGTGAAAAAGGCTCTCAACACAATTATTCTTATTTGTTGTTGTTGTTGTTC 796
GGAAAGGACGCCACTGGCGAGGCTGCCTGCTTACGCTGCTGATGCTGGTGGCCGTGGTGG 760
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16.6%; Score 183.2; DB 4; Length
Best Local Similarity 50.5%; Pred. No. 8.4e-36;
Matches 474; Conservative 0; Mismatches 458; Indels
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TYPE: DNA
ORGANISM: Homo sapiens
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LENGTH: 1020
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 118.6; DB Pred, No. 8.5e-20
                                                         us
                                                         PA-0002
     NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-00:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 845-0555
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1482:
SEQUENCE CHARACTERISTICS:
LENGTH: 2025 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                10.7%;
48.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 48.1
Matches 399; Conservative
                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                          ; LIBRARY: GENBANK
; CLONE: 9984506
US-09-016-434-1482
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Patent NO. 6555339
GENERAL INFORMATION:
APPLICANT: Behan, Dominic P.
APPLICANT: Chalmers, Derek T.
APPLICANT: Chalmers, Derek T.
APPLICANT: Liaw, Chen W.
TITLE OF INVENTION: NO. 6555339-Endogenous, Constitutively Activated Human (TITLE OF INVENTION: NO. 6555339-Endogenous, Constitutively Activated Human (TITLE OF INVENTION: NO. 6555339-Endogenous, Constitutively Activated Human (CURRENT FILING DATE: 1998-10-13
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Pred, No. 2.8e-18;
0; Mismatches 375;
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Best Local Similarity 48.9%;
Matches 384; Conservative
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797 TCAIGGCGAGAGGGAIGCTCCACCIGCCAICCTGIGCCGAGGGGGTTTCTTACTGT 856
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APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS: 1490
ADDRESSEE: INVIE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1900;
                                                                                                                                                                                                                  668 TGCGTGTGGAGAAGCGCCTCAAGACCAAGGCAAAACGCATGATCGCC-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 112; DB 4;
Pred. No. 3.5e-18;
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TELEPA: (650) 845-4166
INPORMATION FOR SEQ ID NO: 1484:
SEQUENCE CHARACIERISTICS:
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NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,(
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APPLICATION NUMBER:
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MEDIUM TYPE: Floppy
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Best Local Similarity
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US-09-016-434-1484
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Parent No. 6555339
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Chalmers, Derek T.
APPLICANT: Liaw, Chen W.
TITLE OF INVENTION: No. 6555339-Endogenous, Constitutively Activated Human G Protein-TITLE OF INVENTION: Receptors
FILE REFERENCE: AREN-0040
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SOFTWARE: Patentin version 3.1
SEQ ID NO 181
LENGTH: 1020
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CITY: L.L.
STATE: Illino..
COUNTRY: USA
ZIP: 6606A
ZIP: 6606A

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBW PC COMPATIBLE
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COMPUTER: IN-NOV-1992
CITAGRAND APPLICATION NUMBER: US/09/17,452
FILING DATE: IT-NOV-1992
ATTOCANEY AGRIT INFORMATION:
MAME: NO. 5758904and, Greet E.
REGISTRATION NUMBER: 31794
TELECOMMUNICATION INFORMATION:
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Pred. No. 3.5e-18;
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Patent No. 5759804
GENERAL INPORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Schweikart, Vicki L.
TITLE OF INVENTION: No. 5759804e1 Seven Transmembrane Receptors
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
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STREET: 6300 Sears Tower, 233 South Wacker Drive
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US-08-153-848-43
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TOPOLOGY: linear
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1308 TCCCGTTCATCACCACGTCACCTGCTACCTGCTGATCATCACCAGCGCAGGGCC 1367
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                                                      797 ICATGGCGAGAAGGTCCTCCACCTGCCATCCTGTGCCGAGGGGCTTTCTTACTGT 856
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                                                                                                                       737 TGCTGATGCTGGTGGCGGTGGTCTGCTTCAGCCCCTACCACCTCAACATCAAGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 43, Application US/09299843A
Patent No. 6107475
GENERAL INFORMATION:
GRAY, Patrick W.
APPLICANT: Gray, Patrick W.
APPLICANT: Schweikatt, Vicki L.
TITLE OF INVENTION: No. 6107475el Seven Transmembrane Receptors
NUMBER OF SEQUENCES: 66
CORRESPONDENCE ADDRESS:
                                                                                     1368 recercidades a contra de la contra de la contra de la contra de la contra de la contra de la contra de la
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/299,843A
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REPERENCE/DOCKET NUMBER: 27866/32059B
TELECOMMUNICATION INFORMATION:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/088,337
FILING DATE: 01-UUN-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/153,848
FILING DATE: 17-NOV-1993
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APPLICATION NUMBER: US 07/977,452
FILING DATE: 17-NOV-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
CMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1901 base pairs
TYPE: nucleic acid
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STRANDEDNESS: single
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CITY: Chicago
STATE: Illinois
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US-09-299-843A-43
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48.9%; Pred. No. 3.5e-18;
tive 0; Mismatches 375; Indels 27; Gaps
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                                                                                                                                                                                                                                                                                                                      US-09-086-337B-43
; Sequence 43, Application US/09088337B
; Patent No. 6348574
; GENERAL INFORMATION:
MOLECULE TYPE: DNA (genomic)
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Best Local Similarity 48.9%
Matches 384; Conservative
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                                                                                                                                            NAME/KEY: CDS

/ LOCATION: 701.

US-09-299-843A-43
                                                                      FEATURE
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1260 AGAÁGGC------CTCCCACATGCCCTGGTGTCCCTGGCAGTGGCCTTCACCT 1307
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GENERAL INFORMATION:
APPLICANT: Godiska, Ronald
APPLICANT: Grow, Patrick W.
APPLICANT: Schweikart, Vicki L.
TITLE OF INVENTION: Novel Seven Transmembrane Receptors
NUMBER OF SEQUENCES: 64
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/11153
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ADDRESSEE: Marshall, O'Toole, Gerstein, Murray
ADDRESSEE: Bicknell
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APPLICATION NUMBER: US 07/977,452
FILING DATE: 17-NOV-1992
ATTORNEY/AGENT INFORWATION:
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REFERENCE/DOCKET NUMBER: 31
FELECOMMUNICATION INFORMATION:
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X: (312) 474-0448
25-3856
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CITY: Chicago
STATE: Illinois
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                                                                   Gray, Patrick W. Schweikart, Vicki L. Schweikart, Vicki L. TITLE OF INVENTION: No. 6348574el Seven Transmembrane Receptors NUMBER OF SEQUENCES: 66 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27;
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10.1%; Score 112; DB 4; Length 19
Best Local Similarity 48.9%; Pred. No. 3.5e-18;
Matches 384; Conservative 0; Mismatches 375; Indels
                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
                                                                                                                                                                                                                                                                                                                                                                                              STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FROM PC COMPUTED
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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APPLICATION NUMBER: US 08/153,848
FILLING DATE: 17-NOV-1993
APPLICATION NUMBER: US 07/977,452
FILLING DATE: 17-NOV-1992
ATTORNEY/AGENT INFORMATION:
NAME: NO. 6346574and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
REPLICATION UNDERS: US/09/088,3378
FILING DATE: 01-Jun-1998
CLASSIFICATION: <UNKnown>
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TELEPHONE: (312) 474-6300
TELEFAX: (312) 474-0448
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STRANDEDNESS: single
                                      APPLICANT: Godiska, Ronald
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                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Chicago
STATE: Illinois
COUNTRY: USA
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10.1%; Score 112; DB 5; Length 1901;
Best Local Similarity 48.9%; Pred. No. 3.5e-18;
Matches 384; Conservative 0; Mismatches 375; Indels 27; Gaps
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                                                                                                                                                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 101.1717
PCT-US93-11153-43
INFORMATION FOR SEQ ID NO: 4
SEQUENCE CHARACTERISTICS:
LENGTH: 1901 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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Search completed: February 21, 2004, 21:28:25 Job time : 115 secs

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February 21, 2004, 19:18:54; Search time 467 Seconds (without alignments) 8277.977 Million cell updates/sec
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| cgn2_6/ptodate/2/pubpna/US07_PUBCOMB.seq:*
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GenCore version 5.1.6
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Listing first 45 summaries
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	Sequence 33, Appl	Sequence 1619, Ap	Sequence 1293, Ap	Sequence 40, Appl	Sequence 35, Appl	Sequence 64, Appl	Sequence 1, Appli	Sequence 77, Appl	Sequence 1279, Ap	Sequence 39, Appl	Sequence 205, App	Sequence 111, App	Sequence 29, Appl	Seguence 90, Appl	Sequence 10498, A
ΔΙ	5 US-10-041-615-33	US-10-017-161-1619	US-10-292-798-1293	US-09-728-952-40	US-09-791-932-35	US-09-801-944B-64	US-10-222-024-1	US-10-251-385-77	US-10-305-720-1279	US-10-247-671-39	US-10-251-385-205	US-10-225-567A-111	US-10-350-923B-29	US-09-812-102-90	US-09-918-995-10498
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% Query Match Length DB	1104	4319	4319	1526	536	556	1086	1086	1643	2477	1086	1638	1556	594	548
% Query Match	100.0	70.6	70.6	60.09	36.0	34.3	16.7	16.7	16.7	16.7	16.6	16.6	15.6	13.4	11.2
Score	1104	779	779	672.8	397.2	378.4	184.8	184.8	184.8	184.8	183.2	183.2	172.2	148	123.4
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Sequence 3, Appli Sequence 20, Appl Sequence 216, App Sequence 722, App Sequence 1482, App	3, AF 1, APF 181, 1884,	equence 30 equence 1, equence 1, equence 1, equence 1, equence 1, equence 25 equence 3, equence 3, equence 3, equence 1,	Sequence 462, App Sequence 1123, Ap Sequence 1123, Ap Sequence 11, Appl Sequence 563, Appl Sequence 567, Appl Sequence 47, Appl Sequence 47, Appl Sequence 7, Appl
14 US-10-023-586B-3 16 US-10-333-946-20 14 US-10-225-567A-216 14 US-10-101-510-722 15 US-10-305-720-1482 15 US-10-305-720-1482	US-09-885-453-3 US-10-079-384-5 US-10-079-384-5 US-09-788-133-1 US-10-251-385-3 US-10-251-385-1 US-10-305-720-1	US-10-225-567A-3 US-10-023-586B-1 US-10-292-798-61 US-10-292-798-61 US-10-275-910-1 US-09-214-90-1 US-09-214-90-2	14 US-10-005-95-844 11 US-09-86-509-462 12 US-10-105-720-1123 14 US-10-005-956-11 14 US-10-005-956-563 14 US-10-005-956-567 14 US-10-005-956-850 14 US-10-005-956-850 15 US-09-823-5678-47
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WESULT 19.39

Sequence 33, Application US/10041615

PUBLICATION: US20040014038A1

Sequence 33, Application US/10041615

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APPLICANT: Edineer, Shlomit R

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PRIOR APPLICATION NUMBER: 60/29,552

PRIOR APPLICATION NUMBER: 60/29,552

PRIOR APPLICATION NUMBER: 60/277,405

PRIOR APPLICATION NUMBER: 60/277,405

PRIOR PLING DATE: 2001-03-20

NUMBER OF SEQ ID NOS: 174

SOFFWARE: CuraSequist version 0.1

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2940 CGCTCTCTGTTCTACACAGCCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTT 2999
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KESULT 2
US-10-017-161-1619

Sequence 1619, Application US/10017161

Publication No. US20030143668A1

Publication No. US20030143668A1

APPLICANT: SUWA, MAKIKO

APPLICANT: SUWA, MAKIKO

APPLICANT: ARAI, KIYOSHI

APPLICANT: ABURATANI, HIROYUKI

ITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTORS

FILE REFERENCE: 084335/0152

CURRENT APPLICATION NUMBER: US/10/017,161

CURRENT APPLICATION NUMBER: US/2001/246789

PRIOR FILING DATE: 2001-06-18

PRIOR FILING DATE: 2001-06-18

NUMBER OF SEQ ID NOS: 2430

SOFTWARE: PatentIN Ver. 2.1

SEQ ID NO 1619

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TYDE: NO. 1619
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| LOCATION: (3660)...(4119)
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Pred. No. 1.6e-215;
0; Mismatches 0;
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                                                                                                                                                                                          | FEATURE: | COCATION: Source | FEATURE: | LOCATION: Source | FEATURE: | LOCATION: (1) ... (4319) | FEATURE: | LOCATION: (201) ... (308) | FEATURE: | LOCATION: (3128) ... (3531) | FEATURE: | LOCATION: (3128) ... (4119) | FEATURE: | LOCATION: (3660) ... (4119) | FEATURE: | LOCATION: (3660) ... (4119) | FEATURE: | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATION: (1) ... (48) | LOCATIO
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Best Local Similarity 83.6%;
Matches 1006; Conservative
PRIOR FILING DATE: 2001-06-18
NUMBER OF SEQ ID NOS: 2070
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1293
LENGTH: 4319
                                                                                                                                          TYPE: DNA ORGANISM: Homo sapiens
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Publication No. US20030235833A1

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: SASI, KIYOSHI
APPLICANT: ASAI, KIYOSHI
APPLICANT: ASAI, KIYOSHI
APPLICANT: ABURATANI, HIROYUKI
TITLE OF INVENTION: GUANCSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS
FILE REPREMENTS: 08435/166
CURRENT APPLICATION NUMBER: US/10/292,798
CURRENT FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: 10/017,161
PRIOR APPLICATION NUMBER: JP 2001-246789
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Query Match 60.9%; Score 672.8; DB 9; Length 1526; Best Local Similarity 81.9%; Pred. No. 7.3e-185; Matches 901; Conservative 0; Mismatches 2; Indels 197; Gaps 3	Oy 98 GCTCTTGTGTTGTACACAGCCCTCGTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTTT 157	Qy 158 GCCTTACCTGTCAAAAGACCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTGG 217				398		Oy 518 CGCTGGTGGCAAGCTGGCCTGCATGGAGTACAGCATGGAGTCAGTC	Oy 578 CCCTCATGGTCCTGGTGGCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCTGT 637	Oy 638 CCTGCTATATGAAGATCACCTGGAAGCTGCAGCACAGCT	679	Db 1021 CGGGAAAGGACACCACGGGGGGGCAGCCCGGGAGGACCCAGTGACCAGCAGGAAAGGAC 1080	679	Db 1081 GCCACGGCGGGCCCAGGACCCCAGTGACCAGCGGGAAAGAACACCACCACCACCAGGGGGGGAAAAGAACAAC	GACAGCCGAGAGGACCCAGTGACCAGGGGAAAGGATGCCACCGGCGGGGAACAGCCGGG	1201 AGGACCCCAGTGACCAGGAGGAAGGACCACCACTGGCAGGGCTGCCTGC					QY 923 CATCCACCATTACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCCT 982
 	CCACCGGCA	GGACAGCCCAGAGGACCCAGTGACCAGGGGAAAGGACGCCACGGGGGGGG	3719 GAGGACCCAGTGACCAGGAAAGGACGCCACTGGCGAGGCTGCCTGC	2 GCGAGAGGGATGCTCCACCTGCCATTCTTGCCGAGGGGAGGGCTTTTTTACTGCCCTTTTTACTGCCCTTTTTACTGCCCTTTTTACTGCCCTTTTTACTGCCCTTTTTACTGCCCTTTTTACTGCTCCTTTTTACTGCTCCTTTTTACTGCTCTTTTACTGCTCTTTTACTGCTCTTTTACTGCTCTTTTACTGCTCTTTTACTGCTCTTTACTGCTCTTTACTGCTCTTTACTGCTCTTTACTGCTCTTTACTGCTCTTTTACTGCTCTTTTACTGCTCTTTTACTGCTCTTTTACTGCTCTTTTTACTGCTCTTTTTACTGCTCTTTTTTACTGCTCTTTTTTTT	AATCATTTACTTCTTT	2 GCATCCACCCATTACAGGAAATGGCTTCTGGGCATTTTAAAGCTCAAGGGTCTTCTTCTCTTCTTCTTCTTCTTCTTCTTCTTCTTC	. 0	TOCTCCTCCTCCTCCTCCTCCACCCCAGGAAAAGCTTCTTCAGAAAAACAATATACCAAGATATAGCTTTATG	4078 CAGGCCAAAGGTTCTATGTTCTTAGCGGAGCACGTGGTCTAACGTGTCATTTGCTTATG #15/ 1102 ACT 1104		SBULT 4 5-09-28-952-40 Sequence 40, Application US/09728952	USZÕÕZO111302F FORMATION:	APPLICANT: Tang, Y. Tom APPLICANT: Zhou, Ping ADPLICANT: GAOdrich, Pule		APPLICANT: Wang, Juan-Rui APPLICANT: Wang, Dunrui APPLICANT: Yanazaki, Vicki	 OF INV	TION NUMBER: US/0 DATE: 2000-11-30 D NOS: 101	SOFTWARE: pt_FL_genes Version 2.0 SEQ ID NO 40	TYPE: DNA ORGANISM: Homo sapiens	FEATURE: NAME/KEY: CDS :ACATTON: (684): (1016)	4

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68 C-GGGGGGTCTACCTCATGGCCTGTGAGCGTGGACCATTACCCAGCTGTGGTCTGTGC 126
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                                                                             465 GACCTTGGTGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAGCCGCTGGT
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Best Local Similarity 98.8%; Pred. No. 1.8e-99;
Matches 403; Conservative 0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            704 AAGGACGCCACTGGCGAGGCTGCCTG 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        426 AAGGACACCACCGCCGCGCCAGCCCG 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
US-09-801-944B-64/c
; Sequence 64, Application US/09601944B
; Publication No. US20040014169A1
; GENERAL INFORMATION:
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; ORGANISM: HOMC
US-09-801-944B-64
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APPLICANT: Link Peeer
APPLICANT: Maybe seen
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APPLICANT: Mackes, Peels
APPLICANT: Medica S.
TITLE OF INVENTION: WOOS Links S.
TITLE PERERNGE: 2001-02-23
TITLE PERERNGE: 2001-02-23
TITLE PERERNGE: 2001-02-23
TELOR PELICATION NUMBER: US/09/791,932
CURRENT APPLICATION NUMBER: 05/184,305
FRIOR PELICATION NUMBER: 06/184,304
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FRIOR PELICATION NUMBER: 06/184,307
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FRIOR PELICATION NUMBER: 06/186,457
FRIOR PELICATION NUMBER: 06
     1440 CATCCACCCATACAGGAAATGGCTCCTGGGCATTTTAAAGCTCAAAGGGTCTTCCTCCT 1499
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                                                                                                                                                                                                                                                    Sequence 35, Application US/09791932 Publication No. US20030003451A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                          Vogeli, Gabriel
Parodi, Luis A.
Hiebsch, Ronald R.
Lind, Peter
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CORGANISM: Homo sapiens
US-09-791-932-35
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US-09-791-932-35
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404 ACCCTCTACGCTACAACAAGATAAAAGGATTGAACATGCAAAAGGCGTGTGCATATTG 463
                                                                                                                                                                                                                                                                                                                                                                                                                                701 GGAAAGGACGCCACTGGCGAGGCTGCCTGCTTACGCTGCTGATGCTGGTGGCCGTGGTGG
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                                                                                                                             464 rerigiarreradrarrecreadaeacreeeacreerereaceeereraneaacearee
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 294
SOFTWARE: PatentIn version 3.1
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, ORGANISM: Homo sapiens
US-10-251-385-77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260 TCCTCCACCCCAGGAAAAGCTTCTTCAGAAACACCCAAGTATCACCCAGGCCAGAGGTTCT 201
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161 TTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTGGCTG 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             164 rearrerreaaakcadgaaaaaarcaacreraccaccererarreacaaaarrregerea 223
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                                                                                               GTGGTCTGCTTCAGCCCCTACCACCTCAACATCAAGCAGTTCATGGCGAGAGGTATGCTC 437
                                                                                                                                                        CACCTGCCATCCTGTGCCGAGCGGAGGCTTTCTTACTGTCCCTTCAGGCCACCGTGGCC 876
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     556 AGCAGGAAAGGACGCCACTGGCGAGGCTGCTGCTTACGCTGCTGATGCTGGTGGCGGTG 497
                                                                                                                                                                                                                                                       CICATGAACATGAACTGTGGCATTACCCCAATCAFTTACTTCTTTGGATCCACCATTAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1057 ATGTTCTTAGCGGAGCACGTGTCTAACGTGTCATTTGCTTTATGACT 1104
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; Publication No. US20030104487A1
; Publication No. US20030104487A1
; GENERAL INFORMATION:
; APPLICANT: Pfizer Ltd. (GB)
; APPLICANT: Pfizer Inc. (EP except GB, US, JP)
; TILE OF INVENTION: Neuropeptide receptor and uses thereof
; FILE REFERENCE: PCS22032
; CURRENT FILING DATE: 2002-08-15
; PRIOR APPLICATION NUMBER: GB 0119920.7
; PRIOR FILING DATE: 2011-08-15
; PRIOR FILING DATE: 2011-08-15
; NUMBER OF SEO ID NOS: 8
; SOFTWARE: FRSESEQ for Windows Version 4.0
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ORGANISM: Homo sapiens
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LENGTH: 1086
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APPLICANT: Behan, Dominic P.
APPLICANT: Behan, Dominic P.
APPLICANT: Chalmers, Derek T.
APPLICANT: Chalmers, Derek T.
APPLICANT: Chalmers, Derek T.
APPLICANT: Chalmers, Chen W.
TITLE OF INVENTION: O. US20030105282A1-Endogenous, Constitutively Activated Human (TITLE OF INVENTION: Receptors
TITLE OF INVENTION: Receptors
FILE REPRENCE: AREN-0040
CURRENT FILING DATE: 2002-09-20
PRIOR PLILOGATION NUMBER: US/09/170,496
PRIOR PLILOGATION NUMBER: US/09/170,496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     . Match 16.7%; Score 184.8; DB 14; Length 1086; Local Similarity 50.6%; Pred. No. 4.8e-43; es 475; Conservative 0; Mismatches 457; Indels 6;
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; OTHER INFORMATION: GenBank ID No. US20040010136A1 g292056
US-10-305-720-1279
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                                                                                                                                                                                                                                                                                                                                                                             Score 184.8; DB 15;
Pred. No. 5.8e-43;
0; Mismatches 457;
                       PRIOR APPLICATION NUMBER: 09/016,434
PRIOR FILING DATE: 1998-01-30
NUMBER OF SEQ ID NOS: 1490
SOFTWARE: PERL PROGRAM
SEQ ID NO 1279
LENGTH: 1643
                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 50.6%;
Matches 475; Conservative
                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
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Publication No. US20040010136A1
GENERAL INFORMATION:
APPLICANT: Au-Young, Janice K.; Seilhamer, Jeffrey J.
TITLE OF INVENTION: Composition for the Detection of Signaling Pathway Gene Expressic
FILE REFERENCE: PA-0002-1 CON
CURRENT APPLICATION NUMBER: US/10/305,720
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y Sequence 205, Application US/10251385
publication No. US20030105292A1
general Information:
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Similarity 50.5%;
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APPLICANT: Shiffman, Dov
APPLICANT: Raser, Matthew R.
APPLICANT: Raser, Matthew R.
TITLE OF INVENTIOR GENES EXPRESSED IN TREATED FOAM CELLS
FILE REFERENCE: PA-0050 US
CURRENT APPLICATION NUMBER: 08/10/247,671
CURRENT PELLING DATE: 2002-09-18
PRIOR PILING DATE: 2001-09-19
NUMBER OF SEQ ID NOS: 186
SEQ ID NOS: 186
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                                                                                      1037 rgaagicagcccrcaagaaarrcacgrgaaar 1074
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0; Mismatches 457;
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                                                                                                                                                             sequence 39, Application US/10247671; Publication No. US20330194721A1
ENERAL INFORMATION: APPLICANT: Mikita, Thomas
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COTHER INFORMATION: a, t, c,
US-10-247-671-39
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OTHER INFORMATION: Incyte
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ORGANISM: Homo sapiens
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Matches 475; Conserv
                                                                                                                                    RESULT 10
US-10-247-671-39
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APPLICANT: Behan, Dominic P.
APPLICANT: Chalmers, Derek T.
APPLICANT: Liaw, Chen W.
TITLE OF INVENTION: No. U320030105292A1-Endogenous, Constitutively Activated Human G
TITLE OF INVENTION: Receptors
TITLE OF INVENTION: Receptors
FILE REPERBNCE: AREN-0040
CURRENT FILING DATE: 2002-09-20
PRIOR APPLICATION NUMBER: US/9/170,496
PRIOR APPLICATION NUMBER: US/9/170,496
PRIOR FILING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 294
SOFTWARE: Patentin version 3.1
SEQ ID NO 205
LENGTH: 1086
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968 AGGCTGAAAGGATTACATGCATGGAGGATTCCAAACTTTGAAGAAACTAAATCTCTTCCCT 1027
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Pred. No. 1.4e-42;
0; Mismatches 458; Indels
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ATAAGAGAAAGGTTATGAGGATGCTGAAACGGCAAGTCAGTGTATCGATTTCTAGTGCTG 1036
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Pred. No. 1.7e-42;
); Mismatches 458; Indels
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; ORGANISM: Homo
US-10-225-567A-111
                                                                                                                                            Query Match
Best Local Simi
Matches 474;
SEQ ID NO 111
LENGTH: 1638
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APPLICANT: Brown, Joseph P.
APPLICANT: Brown, Joseph P.
APPLICANT: Burmer, Glenna C.
APPLICANT: Burmer, Glenna C.
TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS FILE REFERENCE: 1220-4-4
CURRENT REPRESENCE: 1220-12-19
PRIOR APPLICATION NUMBER: 66/257,144
PRIOR APPLICATION NUMBER: 66/257,144
PRIOR APPLICATION NUMBER: 66/257,144
NUMBER OF SEQ ID MOS: 2292
SOFTWARE: Patentin version 3.1
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US-10-225-567A-111
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Sequence 90, Application US/09812102
| Patent No. US20020655179A1
| GENERAL INFORMATION:
| STRIKEL INFORMATION:
| APPLICANT: Robison, Keith E
| TITLE OF INVENTION: No. US20020055179A1e1 G-Protein Coupled Receptor Homologs
| TITLE OF INVENTION: NO US20020055179A1e1 G-Protein Coupled Receptor Homologs
| TITLE OF INVENTION: NO US20020055179A1e1 G-Protein Coupled Receptor Homologs
| CURRENT APPLICATION NUMBER: US/09/812,102
| CURRENT APPLICATION NUMBER: PRIOR APPLICATION NUMBER: US/09/364,769
| PRIOR FILING DATE: 1999-07-30
| NUMBER OF SEQ ID NOS: 90
| SEQ ID NO 90
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820 CTGCCATCC----TGTGCCGAGCGGAGGGCTTTCTTACTGTCCCTTCAGGCCACGTG 873
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                                                                                                                                     760 GTCTGCTTCAGCCCCTACCACCTCAACATCAAGCAGTTCATGGCGAGAGAGGGATGCTCCAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5; Indels
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TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED
TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES
FILE REPERBNOE: 20411-756
CURRENT APPLICATION NUMBER: US/09/918,995
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                                                                                                                                Sequence 29, Application US/10350923B

Publication No. US20040002084A1

General INFORMATION:

APPLICANT: Ma. Xiao Jun

TITLE OF INVENTION: Nucleic acid, polypeptides, vectors, and cells derived from activ

TITLE OF INVENTION: Nucleic acid, polypeptides, vectors, and cells derived from activ

TITLE OF INVENTION: Number: US/10/350,923B

CURRENT FILING DATE: 1999-12-03

PRIOR PILING DATE: 1999-12-03

PRIOR PILING DATE: 1999-06-12

PRIOR FILING DATE: 1999-06-12

PRIOR FILING DATE: 1999-12-04

NUMBER: OF SEQ ID NOS: 79

SOFTWARE PATELLY OF THE NOS: 79

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Pred. No. 2.6e-39;
0; Mismatches 458; Indels 7;
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Best Local Similarity 50.5%;
Matches 474; donservative
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ORGANISM: Homo sapiens
US-10-350-923B-29
                                                                                  RESULT 13
US-10-350-923B-29
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LENGTH: 1556
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CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: US/09/235,076
PRIOR FILING DATE: 1999-01-20
NUMBER OF SEQ ID NOS: 38054
SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 10498
LENGTH: 548
                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(548)
CTHER INFORMATION: n = A,T,C or G
US-09-918-995-10498
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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.	OM nucleic - nucleic search, using sw model	Run on: February 21, 2004, 19:11:15; Search time 2793 Seconds (without alignments) 11803.741 Million cell updates/sec	Title: US-10-041-615-33 Perfect score: 1104 Sequence: 1 atgataaaactaggcccttagtgtcatttgctttatgact 1104	Scoring table: IDENTITY_NUC Gapop 10.0 , Gapext 1.0	Searched: 27513289 segs, 14931090276 residues	Total number of hits satisfying chosen parameters: 55026578	Minimum DB seq length: 0 Maximum DB seq length: 2000000000	Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	Database : EST:* 1: em_estba:* 2: em_estbum:*	3: em_estin:* 4: em_estin:*	 8: em_htc:* 9: gb_est1:* 10: gb_est2:*	12: 9D est3:* 13: 9D est3:* 13: 9D est4:*	15: em_estfun:* 16: em_estcom:*	17: em_ges hum:* 18: em_ges_inv:* 19: em_ges_pln:*	20: em_gss_vrt:* 21: em_gss_fun:* 22: em_gss_fun:*	23: em_gas_mus.* 24: em_gas_mus.*	25: em_gss_rod:* 26: em_gss_phg:* 27: em_gss_vrl:*	28: gb_gss1:* 29: gb_gss2:*	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ALIGNMENTS

Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000) 2 days neonate thymus thymic cells cDNA, RIKEN enriched library, clone: E430001612 product: EEV-INUUCED UPLED RECEPPOR 2 (EBIZ) homolog [Homo sapiens], full letazoa, Chordata, Craniata, Vertebrata, Buteleostomi, theria, Rodentia, Sciurognathi, Muridae, Murinae; Mus Carninci, P. and Hayashizaki, Y. High-efficiency full-length cDNA cloning Meth. Enzymol. 303, 19-44 (1999) 99279253 pper. (house mouse) GI:26104619 AUTHORS TITLE JOURNAL MEDLINE PUBMED REFERENCE AUTHORS JOURNAL MEDLINE TITLE

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L. Direct Submission

Submitted (16-APR-2002) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Yokohama, Institute, 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail; genome - research group, Furt, Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., Art., 
                                                 Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Trabiro, H., Itoh, M., Sumi, N., Ishi, Y., Nakamra, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Yujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watshiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIKBI integrated sequence malysis (RISA) system.-384-format sequencing pipeline with 384 multicapillary sequencer
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Tissues were provided by Dr. John Todd (Dept. of Medical Genetics Wellcome Trust Centre for Molecular Mechanisms in Disease Wellcome Trust Centre for Molecular Mechanisms in Disease Wellcome Trust Centre for Molecular Achanisms in Disease Wellcome Trust Centre for Molecular Mechanisms in Disease Wellcome assistance we gratefully acknowledge.
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/clone_lib="RIKEN full-length enriched mouse cDNA library"
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Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
Nature 420, 563-573 (2002)
6 (bases 1 to 1496)
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/note="EBV-INDUCED G PROTEIN-COUPLED RECEPTOR 2 (EBI2)
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Fax:81-45-503-9216)
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Location/Qualifiers
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949 GCCTGATGAACTICAACTGCTGCATGGACCCGTTCATATACTTCTTTGCATGAAGGGT 1008
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homolog [Homo sapiens] (SWISSPROT|P32249, evidence: FASTY, 87.3%ID, 100%length, match=1082)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 349
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                                                                                                                                                                                                                                                                                                                                                                                       410 CGTACGCAGGTGTGAACTTCATGACTTGCATTAGACCATAGACCGCTTCTTCGCTGTGGT-G 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     461 TCTGGACCTTGGTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAGCCGC 520
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               829 igidetricaegeetaeeaegeeeareareaeaeaeaaaaaaaaaaaeaeaeeeeeee
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      875 CCCTCATGAACATGAACTGTGGGCATTACCCCAATCATTTACTTTTGCATCCACCCATT 934
                                                                                                                                                                                                                                                                                                                 CTCTGTTCTACACAGCCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161 TTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTGGCTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      221 TGPCTGACCTGCTGTTCACCGTGGCCTTACCGGGAAGGGTGGTGTGTTATGTGCTGGGCT
                                                                                                                                                            DB 11; Length 1496;
                                                                                                                                                            Score 211.2, DB 11; Length
Pred. No. 1.2e-33;
0; Mismatches 433; Indels
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us-10-041-615-33.rst

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AL547762 Homo sapiens PLACENTA COT 25.NORMALIZED Homo sapiens CDNA, clone CSODIO17YNOS 5-PRIME, mRNA sequence.
AL547762
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1 (bases 1 to 1097)
1 (A.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
On Feb 15, 2001 this sequence version replaced gi:12882129.
363 ACCIGIAIGGAGIAICCCAACIICGAACCGGIGCCIAACAICICCIAIAICCIGAIIGGC 422
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BP 191 91006 EVRY cedex - France
BR 191 91006 EVRY cedex - France
BR 191 91006 EVRY cedex - France
BR 191 91006 EVRY cedex - France
BR 191 91006 EVRY cedex - France
BR 191 91006 EVRY cedex - France
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 6994.r For
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODI017CG03QPl&cluster=6994.r. Contact :
Feng Librarg Email : fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODI017CG03QPl.
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/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="lst strand cDNA was primed with a NotI-oligo (dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector. Library was normalized.
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                                                                                       GCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCCTGTTCTGCTATATGAAGATC
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al Similarity 49.7%; Pred. No. 5.9e-25;
434; Conservative 10; Mismatches 424; Indels
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/clone="CSODIO17XNO5"
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/db_xref="taxon:8030"

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I Rise "Vector: pBlueScriptIISK+; Variouver: Carlo Biagi,

Mitch Uh and Robert Devlin (DFO, Varcouver, B.C.), Simon

Jones (PBS, Nanaimo, B.C.), Seagpring Hatchery (Crofton,

B.C.), Rachel Roper (University of Victoria)"
                                                                                                      EST 16-MAY-2003
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Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Salmo.
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Beetz-Sargent, Maura Busby, Perer Hunt, Linda McKinnel, BF Koop.
bioinformatics: Gordon D Brown.
Location/Qualifiers
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A survey of Salmo salar transcripts from high complexity cDNA libraries
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University of Victoria
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Best Local Similarity 56.6%; Pred. No. 2.5e-27;
Matches 355; Conservative 0; Mismatches 269; Indels 3;
                                                                                                      CB499474 linear El
ssalkhc013018 kidney Salmo salar CDNA, mRNA sequence.
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/mol_type="mRNA"
/strain="McConnell"
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1 (bases 1 to 1171)
11, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA, libraries and normalization
Unpublished (2001)
                                                                                                                                                          Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
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                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
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/mol type="mRNA"
/db xref="txxxn:9606"
/clone="CSODIO07YIO1"
/tissue type="mrxxxn:9606"
/clone lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="list strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and ECOR V
sites of the pCMVSPORT 6 vector. Library was normalized.
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
library was constructed by Life Technologies, a division of
Invirogen. This sequence belongs to sequence cluster 6994.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi/seq-CSODI007ABOI022cluster=6994.r. Contact
Feng Liang Email : fliang@lifetech.com URL
http://fulllengfh.invirogen.com/ InvirroGen Corporation 1600
Faraday Avenu Genoscope sequence ID : CSODI007ABOI092.
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Contact: Genoscope
Genoscope - Centre National de Sequencage
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BP 191 91006 ENRY cedex - France
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Email: seqrefégenoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 6994.r For
more information about this cluster, see
http://www.genoscope.cns.fr
cgi.bin/cluster.cgi?seq-CSODE014CD09QPl&cluster=6994.r. Contact:
Feng Liang Email: fliang@lifetech.com URL:
http://fullength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODE014CD09QPl.
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1 (bases 1 to 1201)

1 i, W.B., Gruber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

Unpublished (2001)
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                                                                        CCTACGGGGGGGTCTACCTCATGGCCTGTGAGCGTGGACCATTACCCAGCTGTGGTCT
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/clone lib="Homo sapiens PLACENTA"
/note="Vector: pCMVSPORT_6; 1st strand cDNA was
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/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CS0DE014YH17"
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/dev stage="fetal"
/clone_lib="Homo sapiens FETAL LIVER"
/clone_lib="Homo sapiens FETAL LIVER"
/note="Organ: liver; Vector: pCMVSPORT 6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and ECORV sites of the pCMVSPORT 6 vector. Library was not normalized."
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1 (Dases 1 to 979)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Fall-length cDNA libraries and normalization
Unpublished (2001)
On Feb 13, 2001 this sequence version replaced gi:12796030.
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Libraity was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 6994.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi.bin/cluster.cgi?seq=CSODM006BB03QPl&cluster=6994.r. Contact :
Feng Liang Email: fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODM006BB03QPl.
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al Similarity 51.8%; Score 160.2; DB 13; Length
al Similarity 51.8%; Pred. No. 5.7e-23;
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Contact: Smith TPL
USDA, ARS, US Meat Animal Research Center
BO BOX 166, Clay Center, NE 68933-0166, USA
Tel: 402 762 4390
Exx: 402 762 4390
Email: smith@email.marc.usda.gov
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Pred. No. 7.1e-23;
0; Mismatches 261;
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Plate: RG8011 row: N column: 14 Seq primer: TAGAAGGCACAGTCGAGG.
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mol_type="mRNA"
db_xref="taxon:9823"
fissue_type="pooled"
lab_host="DHIOB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
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640 765 700

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AGENICOURT 6543842 NIH_MGC_118 homo sapiens cDNA clone IMAGE:5745818 57, mRNA sequence.
BM549799 1 GI:18785503 EST.
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Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
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Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.W.A.G.E. Consortium/LLNL at:
http://image.llhl.gov. g column: 03
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TCTGGATTCTAGTATTTGCTCAGACACTCCCACTCCTCATCAACCTATGTCAAAGCAGG
                                                                                                                                                               646 AGGCTGAAAGGATTACATGCATGGAGTATCCAAACTTTGAAGAAGTAATGTTCTTTCCT
                                                                                      581 TCATGGTCCTGGTGGCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCCTGTCCT
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NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.
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53.8%; Pred. No. 5.1e-22;
:ive 0; Mismatches 275; Indels 0;
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/lab_host="DH108"
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Location/Qualifiers
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/db_xref="taxon:9606"
/clone="IMAGE:5745818"
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Matches 320; Conservative
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AUTHORS
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BM549799
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Genoscope - Centre National de Sequencage
BP 191 9106 EVXY cedex - France
BP 191 9106 EVXY cedex - France
BP 191 9106 EVXY cedex - France
Email: seqref@qenoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 6994.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi.bh/cluster.cgi?seq=C80D106DE09QP1&cluster=6994.r. Contact :
Feng Liang Email: filangelifetech.com URL:
Feng Liang Email: filangelifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: C80D1060DE09QP1.
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                                                                                                    bp mRNA linear EST 31-MAY-2001
A COT 25-NORMALIZED Homo sapiens CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol Type="mRNA"
/mol Type="mRNA"
/db xref="texton:9606"
/clone="CSOD1060XJ18"
/clone="CSOD1060XJ18"
/clone lib="Homo sapiens PlaCENTA COT 25-NORMALIZED"
/clone lib="Homo sapiens PlaCENTA COT 25-NORMALIZED"
/note="Ist strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and ECOR V
sites of the pCMVSPORT 6 vector. Library was normalized.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 1201)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished (2001)
                                                                                                    AL551903 mRNA AL551903 Homo sapiens PLACENTA COT 25-NORM clone CSODI060YJ18 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                               AL551903
AL551903.2 GI:31273719
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TITLE
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Gaps

δ	101	CTCTGTTCTACACAGCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTTTGCC	160
QQ	190	CICTGCATTACAGCCTCGTCTTCATTGGGCTCGTGGGAAACTTACTAGCCTTGGTCG	249
ογ	161	TTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGAGATCTACCTGGTGCACCTGGCTG	220
Db	250	TCATTGTTCAAAACAGGAAAAATCAACTCTACCACCCTCTATTCAACAAATTTGGTTA	309
λŏ	221	TGTCTGACCTGCTGCTTCACCGTGGCCTTACCGGGAAGGGTGGTGTTATGTGCTGGGCT	280
Db	310	TITCTGATATACTITITACCACCGCTTTGCCTACACGAATAGCCTACTATGCATGGGCT :	369
δ,	281	CCAGCTGGCCTTTCGGCAAGGGGCTCTGCAGGCTGACGCGCGTTTGTGCTCTACACCGACA	340
Db	370	TTGACTGGAGAATGCCTTGTGTAGGATAACTGCGCTAGTGTTTTACATCAACA	429
à	341		400
QQ	430	CATATGCAGGTGTGAACTTTATGACCTGCCTGAGTATTGACCGCTTCATTGCTGTGGTGC	489
à	401	GTGCCCACTGGGGCCCGCGCCTCCGCACGCTGGCCGCCAGGCTGGTCTGCGTGGCCA	460
qq	490	ACCCICTACGCTACAACAAGATAAAAAGGATTGAACATGCAAAAGGCGTGTGCATATTTG	549
ογ	461	TCTGGACCTTGGTGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAGCCGC	520
QQ	550	rcresarrcrastarrrscreagacacreccacrecrearcaaccrargreaageses	609
οχ	521	TGGTGGGCAAGCTGGCTGCATGGAGTACAGCATGGAGTCGTCGTCGTCGTGCCCC	580
Db	610	AGGCTGAAAGGATTACATGCATGGAGTATCCAAACTTTGAAGAAACTANATCTCTTCCCT	699
٥٨	581	TCARGGICCIGGRGCCTTIGCCATIGGCITCTGTGGGCCAGTGGGGATCATCTGTCT	640
. qa	670	GGATTCTGCTTGGGGCATGTTTCATAGGATATGTACTTCCACTTATAATCATTCTCATCT	729
λo	641	GCTATATGAAGATCACCTGGAAGCTGTGCAGCAGAGCTCGGGAGGACCCAGTGAC 695	
Db	730	GCTATTCTCAGATCTGCTGCTAACTCTTTCTTTCAAACTGCAAAAAAAA	

BY765663 LOCUS DEFINITION SOURCE ACCESSION VERSION KEYWORDS

Musecular Butheria; Rodentia; Craniata; Vertebrata; Buteleostomi; Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Muses I (bases I to 715)

I (bases I to 715)

Nikaido,I., Osato,N., Saito,R., Suzuki,H., Yamanaka,I., Kiyosawa,H., Yadi,K., Tomaru,Y., Hasegawa,Y., Nogami,A., Schonbach,C., Gojobori,T., Baldarelli,R., Hill,D.P., Bult,C., Hume,D.A., Quackenbush,J., Schriml,L.M., Kanapin,A., Matsuda,H., Batelory,S., Basiesl,K.W., Blake,J.A., Bradt,D., Brusic,V., Chothia,C., Corbani,L.E., Cousins,S., Dalla,E., Dragani,T.A., Fletcher,C.F., Forrest,A., Frazer,K.S., Gaasterland,T., Garimmond, S., Gustincich,S., Hirokawa,N., Jackson,I.J., Jarvis,B.D., Kanai,A., Kawaji,H., Kawasawa,Y., Kedzierski,R.M., King,B.L., Konagaya,A., Kurochkin,I.Y., Lee,Y., Lenhard,B., Lyons,P.B., Magletima,T., Maltais,L., Marchionni,L., McKenzie,L., Miki,H., Magashima,T., Numata,K., Okido,T., Pavan,W.J., Pertea,G., Pesole,G., Pesole,G., Petarosyky,N., Spilaa,R., Pontius,J.U., Qi,D., Ramachandran,S., Ravasi,T., Red,J.C., Red,D.J., Reid,J., Ring,B.Z., Ringwald,M., Sandelin,A., Schneider,C., Semple,C.A., Sectou,M., Shimada,K., Sulteana,R., Takenaka,Y., Taylor,M.S., Teasdale,R.D., Tomita,M., linear EST 17-DEC-2002 BY765663 RIKEN full-length enriched, activated spleen Mus musculus cDNA clone F830032E22 3', mRNA sequence. Mus musculus (house mouse) Mus musculus BY765663.1 GI:27203835 REFERENCE

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Adachi,J., Aizawa,K., Akimura,T., Azakawa,T., Carninci,P.,
Fukuda,S., Hashizume,W., Hayashida,K., Hirozane,T., Hori,F.,
Fukuda,S., Hashizume,W., Hayashida,K., Hirozane,T., Noojima,Y.,
Kondo,S., Konno,H., Koya,S., Miyazaki,A., Murata,M., Nakamura,M.,
Nommra,K., Numazaki,R., Ohno,M., Ohsato,N., Saito,R., Sakazume,N.,
Sano,H., Sasaki,D., Sato,R., Shibata,R., Shiraki,T., Tagami,M.,
Takeda,Y., Watki,K., Watahiki,A., Muramatsu,M. and Hayashizaki,Y.
Direct Submission
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Computational Analysis of Full-Length Mouse CDNAs Compared with Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)

Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes. Genome Res. 10 (10), 1617-1630 (2000)

RIKEM integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. 10 (11), 1757-1771 (2000)

Computer-based methods for the mouse full-length cDNA encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001) cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
Verardo, R., Wagner, L., Wahlestedt, C., Wang, Y., Watanabe, Y., Walls, C., Wilming, L.G., Wynshaw Boris, A., Yanagiawa, M., Yang, Yang, L., Yuan, Z., Zavolan, M., Zhu, Y., Zimer, R., Carninci, P., Hayateu, N., Hirozane-Kishikawa, T., Konno, H., Nakamura, M., Sakazume, N., Sato, K., Shiraki, T., Waki, K., Kawai, J., Aizawa, T., Fukuda, S., Hara, A., Hashizume, W., Imcrani, K., Ishii, Y., Itch, M., Kagawa, I., Miyazaki, A., Hashizume, W., Imcrani, K., Shinagawa, A., Yasunishi, A., Yoshino, M., Waterston, R., Lander, E.S., Rogers, J., Birney, E. and Hayashizaki, Y. Analysis of the mouse transcriptome based on functional annotation Nature, 420, 563-573 (2002)
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Tissues were provided by Dr. John Todd (Dept. of Medical Genetics Wellcome Trust Centre for Molecular Mechanisms in Disease Wellcome Trust/MRC building Addenbrookes Hospital Cambridge) whose sasistance we gratefully acknowledge.
Please visit our web site (http://genome.gsc.riken.go.jp) for further details.
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/clone_lib="RIKEN full-length enriched, activated spleen"
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52.9%; Pred. No. 5.6e-22;
ive 0; Mismatches 313; Indels 6; Gaps
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/clone="F830032E22"
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Eukaryota, Metazoa, Chordata, Sciurognathi, Muridae; Musinae;
Eukaryota, Metazoa, Rodentia; Sciurognathi, Muridae; Musinae;
Eukaryota, Puruno, M., Kasukawa, T., Adachi, J., Bono, H., Kondo, S.,
Nikaido, I., Osato, N., Saito, R., Suzuki, H., Yamanaka, I.,
Kiyosawa, H., Yagi, K., Tomaru, Y., Hasegawa, Y., Nogami, A.,
Kiyosawa, H., Yagi, K., Tomaru, Y., Hasegawa, Y., Nogami, A.,
Kiyosawa, H., Yagi, K., Tomaru, Y., Bardarili, D.P., Bult, C.,
Hume, D.A., Quackenbush, J., Schrimi, L.M., Kanapin, A., Matsuda, H.,
Batalov, S., Baisel, K.W., Baldae, J.D., Bradt, D., Brusic, V.,
Chothia, C., Corbani, L.E., Cousins, S., Dalla, E., Dragani, T.A,
Fletcher, C.F., Forrest, A., Fraser, K.S., Gaasterland, T.,
Gariboldi, M., Gissi, C., Godzik, A., Gough, J., Grimmond, S.,
Kawali, H., Kawasawa, Y., Redzierski, R.M., King, B.L., Konagaya, A.,
Kurochkin, I.V., Lee, Y., Lenhard, B., Lyons, F.A., Madiott, D.R.,
Maltais, L., Marchionni, L., McKenzie, L., Miki, H., Nagashima, T.,
Numata, K., Okido, T., Pavan, W.J., Pettea, G., Pescole, G.,
Petrovsky, N., Pillai, R., Pontius, J.U., Qi, D., Ramachandran, S.,
Ravasi, T., Reed, D.J., Reid, D.J., Ring, B.Z., Ringwald, M.,
                                                            963 bp mRNA linear EST 17-DEC-2002 BY745873 RIKEN full-length enriched, 2 days neonate thymus thymic cells (NOD) Mus musculus cDNA clone E430001G12 5', mRNA sequence.
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Computational Analysis of Full-Length Mouse cDNAs Compared with
Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
RIKEN integrated sequence, analysis (RISA) system--384-format
sequencing pippeline with 384 multicapillary sequencer. Genome Res.
10 (11), 1757-1771 (2000)
Computer-based methods for the mouse full-length cDNA
encyclopedia: real-time sequence clustering for construction of a
nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001)
CDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Genoup in Riken
Genomic Sciences Center and Genome Exploration of in Riken
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed to
prepare mouse tissues.
Tissues were provided by Dr. John Todd (Dept. of Medical Genetics
Wellcome Trust Centre for Molecular Mechanisms in Disease Wellcome
Trust/MC building Addenbrookes Hospital Cambridge) whose
assistance we gratefully acknowledge.
Please visit our web site (http://genome.gsc.riken.go.jp) for
further details.
Sandelin, A., Schneider, C., Semple, C.A., Setou, M., Shimada, K., Sultana, R., Tagenaka, Y., Taylor, M.S., Teasdale, R.D., Tomita, M., Verardo, R., Wadner, L., Wahlestedt, C., Wang, Y., Watanabe, Y., Wallang, C., Walming, L.G., Wynahaw-Boris, A., Yanagisawa, M., Yang, I., Yang, L., Yuan, Z., Zavolan, M., Zhu, Y., Zimmer, A., Carnind, P., Hayatsun, N., Hirozane-Kishikawa, T., Komno, H., Nakamura, M., Sako, K., Shiraki, T., Komno, H., Nakamura, M., Sako, K., Shiraki, T., Waki, K., Sawai, J., Alzawa, K., Ishii, Y., Itoh, M., Xagwa, I., Miyazaki, A., Sakai, K., Sasaki, D., Shibata, K., Shinagawa, A., Yasunishi, A., Yoshino, M., Materston, R., Lander, B.S., Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNas
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Laboratory for Genome Exploration Research Group, RIKEN Genomic
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
The Institute of Physical and Chemical Research (RIKEN)
T-22 Suebiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Tel: 81-45-503-922
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Adachi,J., Aizawa,K., Akimura,T., Arakawa,T., Carninci,P.,
Adachi,J., Aizawa,K., Akimura,T., Arakawa,T., Carninci,P.,
Fukuda,S., Hashizume,W., Hayashida,K., Hirozane,T., Hori,F.,
Fukuda,S., Korno,H., Yoya,S., Miyazaki,A., Murata,M., Nakamura,M.,
Nomura,K., Numazaki,R., Ohno,M., Ohsato,N., Saito,R., Sakazume,N.,
Sasaki,D., Sato,K., Shibata,K., Shiraki,T., Tsgami,M.,
Takeda,Y., Waki,K., Watahiki,A., Muramatsu,M. and Hayashizaki,Y.,
Direct Submission
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/clone="E430001G12"
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/coll type="thymic cells"
/clone lib=mixExb full-length enriched, 2 days neonate
thymus_thymic cells (NOD)"
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/tissue_type="FETAL LIVER"
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/clone_lib="Home sapiens FETAL LIVER"
/note="Organ: liver; Vector: pCWVSPORT 6; 1st strand cDNA was primed with a Not1-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoRV sites of the pCWVSPORT 6 vector. Library was not normalized."

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BP 191 91006 EVRY cedex - France
Brail: sequenceOpe.cns.fr
http://www.genoscope.cns.fr
cgi-bin/cluster.cgiPseqcSOAM009CC09QP1&cluster=6994.r. Contact :
Feng Liang Email: fliang@lifetech.com URL:
http://tullength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Ganoscope sequence ID : CSOAM009CC09QPI.
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                   230 rcarrerreadadeadadadadadreadereadeacrereranteadreaderea
                                                                                                                                                                                                     290 TITCIGACAICCIGITIACCACAGCITIACCCACICGGAIAGCCIACIAIGIGGCIGGGCI
                                                                                                                                                                                                                                                                                                                                                          CCTACGGGGGGGTCTACCTCATGGCCTGTGAGCGTGGACCATTACCCAGCTGTGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  529 TCTGGATTCTGGTCTTTGCTCAAACACTGCCGCTGCTCCTCACCCCTATGTCTAAGGAGG
                                                                                                                                                                    TGTCTGACCTGCTGTTCACCGTGGCCTTACCGGGAAGGGTGGTGTTTATGTGCTGGGCT
                                                                                                                                                                                                                                                              281 CCAGCTGGCCTTTCGGCAAGGGGCTCTGCAGGCTGACGGCGTTTGTGCTCTACACCGACA
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Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
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/mol_type="mRNA"
/db_xref="taxon:9606"
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BX427288
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                                                                                                                           101 CTCTGTTCTACACACCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTTTGCC 160
                                                                                                                                                                                                                                             161 TTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTGGCTG 220
                                                                                                                                                                                                                                                                                 328 TCATTGTTCAAAACAGGAAAARRATCAACTCTACCACCCTCTATTCAACAATTTGGTGA 387
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(bases 1 to 594)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
NAT-CGAP trtp://www.ncbi.nlm.nih.gov/ncicgap.
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MRNA linear EST 18-DEC-we64e01.x1 Soares_thymus NHFTH Homo sapiens cDNA clone
MAGE:2345880 3' similar to SW:EBI2 HUMAN P32249 EBV-INDUCED G
PROTEIN-COUPLED RECEPTOR 2 ;, mRNA Sequence.
                                                                                                                                                                                                                                                                                                                                                                  221 TGTCTGACCTGCTGTTCACCGTGGCCTTACCGGGAAGGGTGGTGTTATGTGCTGGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                          388 rrichdararachtritalceacecriteceraceacearaeceractarecaareeer
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                                                                 0; Gaps
13.6%; Score 150.6; DB 13; Length 1201; 53.6%; Pred. No. 5.9e-21; Live 2; Mismatches 266; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       808 dcharrcrcadarcrcchdcaachcrrcadaacrdc 844
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                                                                 Matches 309; Conservative
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         Query Match
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AI659965/c
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KEYWORDS
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Mus musculus (nouse mouse)

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Musina (Dases I to 662)

Sokazaki,Y.; Furuno,M.; Kasukawa,T.; Adachi,J.; Bono,H.; Kondo,S.;

Nikaido,I.; Osato,N.; Saito,R.; Suzuki,H.; Yamanaka,I.;

Kiyosawa,H.; Yaqi,K.; Tomaru,Y.; Hasegawa,Y.; Nogami,A.;

Schonbach,C.; Gojobori,T.; Baldarelli,R.; Hill,D.P.; Bult,C.;

Hume,D.A.; Quackenbush,J.; Schrimil,L.M.; Kanaphi,A.;

Batalov,S.; Beisel,K.W.; Blake,J.A.; Bradt,D.; Brusic,M.;

Chothia,C.; Corbani,L.B.; Cousins,S.; Dalla,B.; Dragani,T.A.;

Fletcher,C.F.; Forrest,A.; Frazer,K.S.; Gaasterland,T.;

Gariboldi,M.; Gissi,C.; Godzik,A.; Gough,J.; Gimmond,S.;

Kawaji,H.; Kawasawa,Y.; Kedzierski,R.M.; King,B.L.; Konagaya,A.;

Kurochkin,I.V.; Lee,Y.; Lenhard,B.; Lyons,P.A.; Maglott,D.R.;

Maltais,L.; Marchionni,L., McKenzie,L.; Miki,H.; Nagashima,T.;

Numata,K.; Okido,T.; Pavan,W.J.; Pertea,G.; Pesole,G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BY729793 RIKEN full-length enriched, adult male hippocampus Mus musculus cDNA clone C630037105 5', mRNA sequence.
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/lab_host="DH10B (phage-resistant)"
/clone_lib="Soares thymus NHFTh"
/note="Organ: thymus, pooled; Vector: pr773D-Pac
(Pharmacia) with a modified polylinker; Site 1: Not I;
Site 2: Boc RI; lst strand cDNA was primed with a Not I oligo(dT) primex [5'
representation of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization, Library constructed by Bento Soares and M. Fatima Bonaldo. "
                                 Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 1014 Std Error: 0.00
Seq primer: -40UP from Gibco
High quality sequence stop: 408.
Location/Qualifiers
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471 GGGGTCTACCTCATGGCCTGTGTGAGCGTGGACCATTACCCAGCCGTG 424
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:2345880"
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Reversity, N., Pillain, P., Pontine, V., Thing, B. Z., Ringbald, N., Sandale, N., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S., Schneider, S.,
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BI768868 861 bp mRNA linear EST 25-SEP-2001 603057774P1 NIH MGC_122 Homo sapiens cDNA clone IMAGE:5207011 5', mRNA sequence.
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Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mawaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.
1 (bases 1 to 861)
NIH-MGC http://mgc.nci.nih.gov/.
NIH-MGC http://mgc.nci.nih.gov/.
Ontional Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
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Email: cgapbe-remail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution: MGC clone distribution: MGC clone distribution: MGC clone distribution: MGC clone distribution: MGC clone distribution the I.M.A.G.E. Consortium/LLNL at:

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RESULT 1 AX702273 LOCUS DEFINITION ACCESSION VERSION	AX702273 Sequence 33 from Patent WO02064793. AX702273.1 GI:29537547
KEYWORDS SOURCE ORGANISM	Homo sapiens Homo sapiens Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE	Casman, S.J., Edinger, S.R., Ellerman, K., Smithson, G., Kekuda, R. and
TITLE	murallonara,k. Novel gpcr-like proteins and nucleic acids encoding same

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/DOCOMORD 1 de "CAD69676.1"

/db_xref="G1:28800144"

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/translation="WFVDSVGDDEGTVCMIFLCSLTLEVSAEXDQQLGLAFRQGAL
QADGVCALHRHLRGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLO

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LQPLPPQHQAYHGERDAPPALLCRAGGFLYVPSGHRGPHEHELWHYPFIYFPASTHYR

KWLLGILKLKGSSSSSSSSSSSSSTPGKASSETPSITQARGSPHEHELWHYPFIYFPASTHYR
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Guanosine triphosphate-binding protein coupled receptors

Patent: EP 1270724-A 1293 02-JAN-2003;

National Institute of Advanced Industrial Science and Technology

(JP); Center for Advanced Science and Technology Incubation, Ltd.

(JP)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                CTCAACATCAAGGATTCATGGCGAGAGGATGCTCCACCTGCCATCCTGTGCGAGGG
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AGGGCTTTCTTACTGTCCCTTCAGGCCACCGTGGCCCTCATGAACATGAACTGTGGCATT
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larity 99.8%; Pred. No. 3.5e-258;
Conservative 0; Mismatches 0; Indels
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/db xref="taxon.9606"
/db xref="taxon.9606"
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/codon_start=1
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Sequence 1293 from Patent EP1270724.
AX647101. GI:28800143
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/note="AluJb repeat: matches 85. .310 of consensus"
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Direct Submission

Direct Submission

Direct Submission

CB10 1SA, UK. E-mail enquiries: humquery@sanger.ac.uk Clone

requests: clonerequery@sanger.ac.uk

on Apr 12, 2001 this sequence version replaced gi:13276997.

During sequence assembly date is compared from overlapping clones.

Where differences are found these are annotated as variations

together with a note of the overlapping clone name. Note that the

variation annotation may not be found in the sequence submission

corresponding to the overlapping clone, as we submit sequences with

only a small overlap as described above.

This sequence was finished as follows unless otherwise noted: all

regions were either double-stranded or sequenced with an alternate

chemistry or covered by high quality date (i.e., phred quality >=

30); an attempt was made to resolve all sequencing problems, such

as compressions and repeats; all regions were covered by at least

one plasmid subclone or more than one M13 subclone; and the

assembly was confirmed by restriction digest. The following

abbreviations are used to associate primary accession numbers given

in the feature table with their source databases: Em:, EMBL; Sw:,
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Human DNA sequence from clone RP11-178C10 on chromosome 13,
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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CGCTCTCTGTTCTACACAGCCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTT
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SWISSPROT; Tr:, TREMBL; Wp:, WORMPEP; Information on the WORMPEP database can be found at
http://www.sanger.ac.uk/Projects/C_elegans/wormpep This sequence
was generated from part of bacterial clone contigs of human
chromosome 13. constructed by the Sanger Centre Chromosome 13
Apping Group. Further information can be found at
http://www.sanger.ac.uk/HGP/Chr13
RP11-178C10 is from the hibrary RPCI-11.1 constructed by the group
of Pieter de Jong. Por further details see
http://www.chori.org/bacpac/home.htm
VECTOR: PBACB.3.
IMPORTANT: This sequence is not the entire insert of clone
RP11-178C10 It may be shorter because we sequence overlapping
sections only once, except for a 100 base overlap.
The true right end of clone RP11-178C10 is at 1988c1 in this
sequence. The true right end of clone RP11-178C103 is at 100 in this
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TREMBL; Wp:, WORMPEP; Information on the WORMPEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone_lib="RPCI-11.1"
161. .463
/note="LiMB8 repeat: matches 5836. .6160 of consensus"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .5577 of consensus"
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23981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="MER47B repeat: matches 2. .413 of consensus"
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note="L2 repeat: matches 2128. .2206 of consensus"
730. .7233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       893. .8994
note="L2 repeat: matches 1551. .1656 of consensus"
079. .9126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat: matches 3474. .3949 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .2881 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1555. .4646
note="12 repeat: matches 1031. .1120 of consensus"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="L2 repeat: matches 1330. .1889 of consensut 3301. .8499 'note="MIR repeat: matches 17. .219 of consensus"
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'notes"FAM repeat: matches 2. .165 of consensus"
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fnote="Li repeat: matches 2226. .2881 of con (6310. .17185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   note="LiMC4 repeat: matches 7197. ,7976 of 20797. ,21100
fnote="AluX repeat: matches 1. .297 of conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             conserved"
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note="L1M1 repeat: matches 5264.
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'note="MER7A repeat: matches 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              079. .9126
note="24 copies 2 mer at 75%
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1. .98861
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic_DNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /chromosome="13"
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23758. .23
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/note="L2
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repeat_region	574025 note="MIR
repeat_region	5982 .26012 Sombi) repeat: matches 2701273
repeat_region	35. 10. 10. 10.
repeat_region	onsens 6209 note="7
repeat_region	651428201 note="Tigger4(Zombi) repeat: matches 117
repeat_region	onser 2616. note:
repeat_region	.35362 .35362 .15 conjes 2 mer ac 100% con
repeat_region	mocte="2 copies 42 mer 97% conserved" note="2 copies 42 mer 97% conserved"
regi	. 37274 "AluSq repeat: matches 1.
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at_regi	. 70
at_regi	=
r_regi	4117541482 /note="AluSp repeat: matches 1309 of consensus"
epeat_regi	
epear_regi	41/9141842 /note="L2 repeat: matches 12151266 of consensus"
regi	42011. 42273 /note="MER74A repeat: matches 2555 of consensus"
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rear rear	4426244/08 /note="MLTIC repeat: matches 1466 of consensus"
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ear_regi	4538945539 /note="MERSB repeat: matches 4175 of consensus"
ear_regi	4563945/88 /note="WERSA repeat: matches 9184 of consensus"
20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4375346162 /note=MMR repeat; matches 25250 of consensus" //oci
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מין זמ) J.3031/J. Jote="MIR repeat: matches 118178 of consensus" 5/848 5747
epeat_regi	note 3138
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                                                                                                                                                                                                                                                                                                       /note="LiME3A repeat: matches 5789. .6157 of consensus" 59198 .59336 /note="MER74A repeat: matches 1. .139 of consensus" 5937. .59435 /note="MLTIG repeat: matches 169. .264 of consensus" 59626 .59726 /note="MLTIF repeat: matches 437. .541 of consensus" 5964. .60249 /note="LiME3A repeat: matches 5301. .5782 of consensus"
                                                                                          57561. 58049
//noce="MRR74A repeat: matches 1. 519 of consensus"
58036. 58287
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58336. 58475
//noce="MILIG repeat: matches 76. 205 of consensus"
58456. 58809
//noce="MILIG repeat: matches 1. 311 of consensus"
584818. 59182
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57560 .57560
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Best Local Similarity 99.8%; Pred. No. 4.1e-258;
Matches 581; Conservative 0; Mismatches 0; Indels 1;
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AC016189 151174 bp DNA linear HTG 13-JUL-2000 from sapiens clone RP11-23M9, LOW-PASS SEQUENCE SAMPLING. AC016189

LOCUS DEFINITION ACCESSION

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2: gap of 100 bp at contrig of 881 bp in length at gap of 100 bp at contrig of 831 bp in length at gap of 100 bp at contrig of 847 bp in length at gap of 100 bp at length at gap of 100 bp at length at gap of 100 bp at length at gap of 100 bp at length at length at gap of 100 bp at length at gap of 100 bp at length at length at gap of 100 bp at length at gap of 100 bp at length at length at gap of 100 bp at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length at length
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                                                                                     Eukaryogicu; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases I to 151174)
Birren, B., Linton, L., Nusbaum, C. and Lander, E.
Homo, sapiens, clone RP11-23M9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      * NOTE: This record contains 152 individual
* sequencing reads that have not been assembled into
* contigs. Runs of N are used to separate the reads
* and the order in which they appear is completely
* arbitrary. Low-pass sequence sampling is useful for
* identifying clones that may be gene-rich and allows
* overlap relationships among clones to be deduced.
* However, it should not be assumed that this clone
* will be sequenced to completion. In the event that
* the record is updated, the accession number will
* be preserved.
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contig of 845 bp in length
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                                 HTG; HTGS_PHASE0.
Homo sapiens (human)
                                                                         Homo sapiens
                                                                                                                                                                                      Unpublished
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SOURCE
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JOURNAL
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AUTHORS
TITLE
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139048 IGCATGGAGTACAGCATGGAGTCAGTCCTCGGGCTGCCCCTCATGGTCCTGGTGGCC 139107
                                                 Homo sapiens clone RP11-23M9, LOW-PASS SEQUENCE SAMPLING.
AC016189.
AC016189.3 GI:9129134
HTG: HTGS PHASEO.
Homo sapiens (human)
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Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                  CIGCAGACGAIGCCCTIGCTCTTGAIGCCCAIGACCAAGCCGCTGGTGGGCAAGCTGGCC
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15.9%; Score 176; DB 6; Length 536;
Best Local Similarity 99.6%; Pred. No. 6.3e-91;
Matches 226; Conservative 0; Mismatches 1; Indels
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Novel g protein-coupled receptors
Patent: WO 1052797-A 35 30-AUG-2001;
PHARMACIA & UPJOHN COMPANY (US)
Location/Qualifiers
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
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Sequence 35 from Patent WO0162797.
AX230148
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AUTHORS
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87: contig of 853 bp in length
87: gap of 100 bp
42: contig of 855 bp in length
12: gap of 100 bp
8: contig of 846 bp in length
8: gap of 100 bp
9: contig of 860 bp in length
9: gap of 100 bp
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5: contig of 852 bp in length
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3: gap of 100 bp
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of 849 bp in length
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Best Local Similarity 99.8
Matches 488; Conservative
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                                                                                                                                                     Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 151174)

Birren, B., Linton, L., Nusbaum, C. and Lander, B.

Homo sapiens, clone RPII-23M9

1 (bases)
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* sequencing reads that have not been assembled into
* contigs. Runs of N are used to separate the reads
* and the order in which they appear is completely
* arbitrary. Low-pass sequence sampling is useful for
* identifying clones that may be gene-rich and allows
* overlap relationships among clones to be deduced.
* However, it should not be assumed that this clone
* will be sequenced to completion. In the event that
* the record is updated, the accession number will
* be preserved.
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Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
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G protein-coupled receptors
Patent: WO 0166750-A 64 13-SEP-2001;
PHARMACIA & UPJOHN COMPANY (US)
LOCALION/QUALIFIERS
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/mol_type="unassigned DNA"
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           Homo sapiens
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AC117702/c
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Elizan, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L., Anderson, S., Barna, N., Camarata, J., Campoplano, A., Chang, J., Chang, J., Chang, J., Chang, J., Cook, A., Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Faro, S., Rezreira, P., FitzHugh, W., Gage, D., Galagan, J., Gardyna, S., Ginde, S., Goyette, M., Graham, L., Grand-Pierre, N., Gardyna, S., Ginde, S., Goyette, M., Graham, L., Grand-Pierre, N., Gardyna, S., Landers, R., Marchas, A., Karlas, A., Kella, C., Lakocque, K., Landazares, R., Landers, T., Lehoczky, J., Lavine, R., Lindblad-Toh, K., Liu, G., Macdonald, P., Major, J., Marquis, N., Matthews, C., Macdonald, P., Major, J., Marquis, L., Macha, C., Nicol, R., Minga, V., Murphy, T., Nay, Dr., J., Menga, L., Norman, C., Nicol, R., Norwan, C., Retras, R., Peterson, K., Phunkharg, P., Pierre, N., Pollara, V., Raymond, C., Retter, R., Phunkharg, P., Pierre, N., Pollara, V., Stolaner, S., Sewan, J., Sencer, M., Santos, R., Stange-Thomann, N., Stolanovic, N., Strauss, N., Subramanian, A., Travers, N., Travers, N., Travers, N., Travers, N., Travers, N., Travers, N., Travers, N., Travers, N., Travers, N., Viel, N., Viel, N., Viel, N., Viel, N., Viel, R., Viel, K., Viel, N., Travers, N., Yeung, G., Ye, W.J., Young, G., Viel, N., Viel, R., Wilson, B., Wil, X., Wyman, D., Ye, W.J., Young, G.,
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Mus musculus chromosome 10, clone RP23-46412, complete sequence.
AC117702
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Mus musculus
Mus musculus
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Medentia; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 147559)
Birren, B., Nusbaum, C. and Lander, E.
Mus musculus chromosome 10, clone RP23-46412
Unpublished
2 (bases 1 to 147559)
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                                                                                                                                                                                                                                                                      556 AGCAGGAAAGGACGCCACTGGCGAGGCTGCCTGCTTACGCTGCTGATGCTGGTGGTCGTG
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         DB 6; Length 556;
tch
al Similarity 99.5%; Pred. No. 6e-81;
209; Conservative 0; Mismatches 1; Indels
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PAT 28-SEP-2001

linear

AX244735 Sequence 64 from Patent WO0166750. AX244735.1 GI:15859614

DEFINITION ACCESSION VERSION KEYWORDS SOURCE

LOCUS

Homo sapiens (human)

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/rpt_family="B2_Mm1" 4866. .4970 /rpt_family="B2_Mm2" 7159. .7327

us-10-041-615-33.oli10.rge

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Direct Submission

Direct Submission

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Direct Submission

Bubmitted (14759)

Burnal, 320 Charles Street, Cambridge, MA 02141, USA

4 (bases 1 to 14759)

Birren, B., Nusbaum, C., Lander, E., Abouelleil, A., Allen, N.,

Boguslawkiy, L., Boukhgalter, B., Camarata, J., Chang, J., Choepel, Y.,

Collymore, A., Cook, P., Corum, B., DeArellano, K.,

Diaz, J.S., Dodge, S., Dooley, K., Dorris, L., Erickson, J., Faro, S.,

Ferreira, P., FitzGerald, M., Gage, D., Galagan, J., Gardyna, S.,

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Nguyen, C., Nicol, R., Mihova, T., Mlenga, V., Murphy, T., Naylor, J.,

Nguyen, C., Nicol, R., Norbu, C., O'Conner, T., O'Donnell, P.,

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Rachupka, R., Ramasamy, U., Raymond, C., Retta, R., Rise, C., Rogov, P.,

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Voung, G., Zainoun, J., Zembek, L., Zimmer, A. and Zody, M.

Direct Submission

Submitted (04-DEC-2003) Whitehead Institute/MIT Center for Genome

Research, 320 Charles Street, Cambridge, MA 02141, USA

On Dec 4, 2003 this sequence version replaced gi:38198681.

All repeats were identified using Repeatbasker:

All repeats were identified using Repeatbasker:

All repeats were identified using Repeatbasker:

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All Repeats were identified using Repeatbasker:
                                                                                                                                                    Submitted (10-APR-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA (bases 1 to 147559)
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Center: Whitehead Institute/ MIT Center for Genome Research
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------- Project Information
Center project neme: 1.24127
Center clone name: 464_1_2
Zainoun,J., Zembek,L., Zimmer,A. and Zody,M. Direct Submission
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Web site: http://www-seg.wi.mit.edu
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AUTHORS
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Only the last 147.6 kilobases of this clone are being submitted. The remainder overlaps accession number AC113207 [WICGR project L23741]. Location/Qualifiers
1. 147559
/organism="Mus musculus"
/mol_type="genomic DNA"

FEATURES

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237255: contig of 237255 bp in length
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TITLE
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Allen, C., Allen, H., Alsbrooks, S., Amin, A., Anguiano, D., Anyalebechi, V., Aoyagi, A., Ayogil, M., Baca, E., Baden, H.,
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Gannandez, S., Finley, M., Flagg, N., Folbes, L., Foster, M., Guerra, W.,
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Rattus norvegicus clone CH230-6015, WORKING DRAFT SEQUENCE, 4
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Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
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HTG; HTGS_PHASE1; HTGS_DRAFT; HTGS_FULLTOP.
Rattus norvegicus (Norway rat)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.1%; Score 34; DB 10; L
100.0%; Pred. No. 1.9e-07;
tive 0; Mismatches 0;
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Best Local Similarity
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AC095386
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Nankervis, C., Neal, D., Newton, N., Nguyen, N., Norris, S., Nwaokeleneh, O., Okwuonu, G., Olarmpunsagoon, A., Pal, S., Parks, K., Pasternak, S., Paul, H., Perez, A., Perez, L., Férankoch, C., Plopper, F., Poindexter, A., Popovic, D., Primus, B., Pu, L. L., Plopper, F., Poindexter, A., Popovic, D., Primus, B., Pu, L. L., Redilly, R., Redilly, R., Redilly, R., Redilly, R., Ren, Y., Reuer, M., Richards, S., Riggs, F., Rives, C., Rodkey, T., Rojas, A., Rose, R., Rose, R., Riggs, F., Sanders, M., Savery, G., Scherer, S., Scott, G., Shatsman, S., Shen, H., Sneed, A., Sadergren, E., Song, T., Sitter, C.D., Samajs, D., Sneed, A., Strong, R., Sutton, A., Svatek, A., Tabor, P., Taylor, C., Taylor, T., Thomas, M., Thomas, S., Tingey, A., Tabor, P., Taylor, T., Thomas, M., Monder, M., Walker, B., Wang, S., Wars, W., Wallson, R., Wallson, R., Wallson, R., Wallson, R., Wallson, R., Wallson, R., Wallson, R., Warsen, J., Waright, R., Wu, J., Yakub, S., Yen, J., Yoon, U., Yu, F., Zhang, J., Zhou, J., Zhou, X., Zhao, S., Dunn, D., von Niederhausern, A., Weiss, R., Smith, D.R., Holt, R.A., Smith, H.O., Wenley, R.C. Loghes and Gibbs, R.A. Smith, D.R., Holt, R.A., Smith, H.O., Wenley, R.C. Loghes and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing Center, Department of Molecular and Human Genome Sequencing College of Medicine, One
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NOTE: This is a 'working draft' sequence. It currently consists of 4 contigs. The true order of the piaces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
Submission
Submitted (109-MRX-2003) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
On May 9, 2003 this sequence version replaced gi:24941434
On May 9, 2003 this sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Consensus quality: 236293 bases at least Q40
Consensus quality: 237786 bases at least Q30
Consensus quality: 239195 bases at least Q20
Estimated insert size: 248197; sum-of-contigs estimation
Quality coverage: 8x in Q20 bases; sum-of-contigs estimation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hggc-help@bom.tmc.edu
Contact: hggc-help@bom.tmc.edu
Center project Information
Center project name: GCAQ
Center clone name: GA30-6015
Center clone name: GA30-6015
Assembly program: Atlas;
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Center code: BCM
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Rat Genome Sequencing Consortium.
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The Rice Full-Length CDNA Consortium, National Institute of Agrobiological Sciences Rice Full-Length CDNA Project Team:, Kikuchi, S., Satoh,K., Nagata,T., Kawagashira,N., Doi,K., Kishimoto,N., Yazaki,J., Ishikawa,M., Yamada,H., Ooka,H., Hotta,I., Kojima,K., Namiki,T., Ohneda,E., Yahagi,W., Suzuki,K., Li,C., Confsuki,K., Shishiki,T., Foundation of Advancement of International Science Genome Sequencing & Analysis Group:, Otomo,Y., Murakami,K., Kurosaki,T., Kodama,T., Maruda,H., Kobayashi,M., Xie,Q., Lu,M., Narikawa,R., Sugiyama,A., Mizuno,K., Yokomizo,S., Niikura,J., Kawamata,M., Yoshimura,A., Mizuno,K., Yokomizo,S., Niikura,J., Kawami,J., Carninci,P., Adachi,J., Aizawa,K., Rff.En:, Kawai,J., Carninci,P., Adachi,J., Matsubara,K., Rff.En:, Kagawa,I., Konno,H., Miyazaki,A., Ishii,Y., Itoh,M., Saito,R., Sasaki,D., Sato,K., Shibata,K., Shinagawa,A., Shiraki,T., Collection, mapping, and annotation of over 28,000 cDNA clones from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Adachi J., Alzawa, K., Akimura, T., Arakawa, T., Carninci, P., Doi, K., Fujimura, T., Fukuda, S., Hanagaki, T., Hara, A., Hashizume, W., Fujimura, T.-, Fukuda, S., Hanagaki, T., Hara, A., Hashizume, W., Hayashizaki, Y., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hori, F., Horta, I., Iida, J., Iida, Y., Ikeda, R., Imamura, K., Imamura, K., Imamura, K., Imamura, K., Imamura, K., Imamura, K., Imamura, S., Kandoh, H., Kawagashira, N., Kawai, J., Kawai, J., Kawai, S., Kandoh, M., Kawagashira, N., Kawai, N., Kobayashi, M., Kodama, T., Kojima, K., Kojima, Y., Kondo, S., Konno, H., Kodama, T., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Kodama, T., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Murakami, K., Sabaki, D., Sato, K., Satoh, K., Sahai, K., Sakai, C., Sakai, K., Shinagawa, A., Shiraki, T., Shishiki, T., Sogabe, Y., Sugano, S., Shinagawa, A., Suzuki, K., Suzuki, Y., Tagami, M., Tagami, M., Takahashi, F., Takaku-Akahira, S., Tanaka, T., Tomaru, A., Toya, T., Tamamoto, M., Yasunishi, A., Yazaki, J., Yokomizo, S. and Vanishi, M., Yazaki, J., Yokomizo, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                AK067772 1695 bp mRNA linear PLN 24-JUL-2003
Oryza sativa (japonica cultivar-group) cDNA clone:J013120L23, full
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AK067772.1 GI:32977790

BI_COND, CAP trapper.

Oryza sativa (japonica cultivar-group)

Oryza sativa (japonica cultivar-group)

Oryza sativa (japonica cultivar-group)

Strappota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta, Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae, Enrhartoideae, Oryzeae, Oryza.
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Submitted (05-DEC-2001) Shoshi Kikuchi, National Institute of
                                                                                                                                                              .
0
                                                                                                     Length 227;
                                                                                                     Query Match
3.0%; Score 33; DB 8; L¢
Best Local Similarity 100.0%; Pred. No. 5.3e-07;
Matches 33; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                    973 TCTTCCTCCTCCTCCTCCTCCTCCTCCACC 1005
                                                                                                                                                                                                                                                     98 TCTTCCTCCTCCTCCTCCTCCTCCTCCTCCACC 130
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Science 301 (5631), 376-379 (2003)
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AK067772/c
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JOURNAL
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Direct Submission
Submitted (10-3M-2001) Genomics, Monsanto, 800 North Lindbergh
Blvd., Crove Coeur, MO 63167, USA
Derived from rice genomic sequences generated from the Monsanto
Rice Genome Sequencing project. Please see
http://www.rice-research.org for more information. The sequence
data were produced primarily in the laboratories of Dr. Leroy Hood
at the University of Washington in Seattle.
Location/Qualifiers
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1 (bases 1 to 227)
Tao, M., Barbazuk, W.B., Liu, J., Wu, K. and Barry, G.F.
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Best Local Similarity 100.0%; Pred. No. 2e-07;
Matches 34; Conservative 0; Mismatches 0; Indels
6 237355: gap of unknown length
6 238603: contig of 1148 bp in length
4 238603: gap of unknown length
4 239798: contig of 1195 bp in length
9 239898: gap of unknown length
9 242813: contig of 2315 bp in length.
Location/Qualifiers
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/db_xref="taxon:4530"
1. .227
/note="microsatellite MRG5778"
                                                                                                                                                                                         1. .242813
/organism="Rattus norvegicus"
/mol_type="agenomic DNA"
/db_xref="taxon:10116"
/clone="CH230-6015"
                                                                                                                                                                                                                                                                                                                             1. .2171
/note="wgs end extension
clone end:Sp6"
3006. .3795
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234294. .237255
/note="wgs_end_extension
clone_end:T7"
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177728. .189718
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/note="clone boundary
clone_end:Sp6
site:EcoRI
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/note="clone_boundary
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us-10-041-615-33.oli10.rge

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Shinn, P., Chen, H., Cheuk, R., Kim, C.J., Boweer, L., Carninci, P., Dale, J. M., Hayashizaki, Y., Ishida, J., Jones, T., Kamiya, A., Karlin-Neumann, G., Kawai, J., J., Lim, J., Miranda, M., Narusaka, M., Nayen, M., Onodera, C.S., Palm, C.J., Quach, H.L., Sakurai, T., Satou, M., Seki, M., Southwick, A., Toriumi, M., Wong, C., Wu, H.C., Yamada, K., Yu, G., Shinozaki, K., Davis, R.W., Theologis, A. Direct Submission Salk Institute Genomic Analysis Laboratory (StGnAh), Plant Biology Laboratory, The Salk Institute for Biological Studies, 10010 N. Torrey Pines Road, La Jolla, CA 92037,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ESSRYSSSSDSDSES
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      Agrobiological Sciences, Department of Molecular Genetics, Head of Laboratory of Gene Expression; 2-1-2 Kannondai, Tsukuba, Ibaraki 105-8602, Japan (B-mail:skikuchlainsa.affrc.go.jp, Tel:81-29-838-7007)
This clone is one of the 28K full-length cDNA clones from japonica rice.

URL: http://cdnaol.dna.affrc.go.jp/cDNA/
NIAS Rice Full-Length cDNA Project Team: Kikuchi, S., Satoh, K., Namaki, T., Kawagaahiran, Doi, K., Kishimoto, N., Yazaki, J., Ishikawa, M., Yamada, H., Ooka, H., Hotta, I., Kojima, K., Namiki, T., and Yamamoto, M., Yamada, H., Ooka, H., Hotta, I., Kojima, K., Namiki, T., Kuzuki, K., Li, C., Ohtsuki, K., Shishiki, T., Ruzuki, R., Ishipiki, J., Kawamata, M., Kobayashi, M., Kodama, T., Kuzuka, R., Nihimra, J., Oka, M., Kola, M., Kobayashi, M., Mirura, T., Kuzuka, R., Nihimra, J., Oka, M., Kapu, R., Sugano, S., Suzuki, Y., Tsunoda, Y., Uda, M., Xie, Q., Yokomizo, S., Suzuki, Y., Tsunoda, Y., Uda, M., Xie, Q., Yokomizo, S., Sugiyama, A., Suzuki, Y., Tsunoda, Y., Uda, M., Xie, Q., Yokomizo, S., Yohimura, T., Matsubara, K. and Mrakami, K., Mazawa, K., Harangaki, T., Haranga, T., Arawa, T., Arawa, T., Rangawa, T., Kanngawa, T., Kapai, J., Imamura, K., Imotani, K., Ishi, Y., Itoh, M., Kagawa, I., Kanngawa, S., Katoh, H., Kawai, J., Kawai, J., Kawai, J., Kawai, J., Kawai, J., Kawai, J., Kanngawa, S., Katoh, H., Kawai, T., Kolima, Y., Kondo, S., Konno, H., Kakai, C., Matsuyama, T., Matsuyama, T., Matsuyama, T., Matsuyama, T., Matsuyama, T., Matsuyama, T., Matsuyama, T., Matsuyama, T., Matsuyama, T., Matsuyama, T., Sakai, C., Sakai, K., Shinagawa, A., Sakai, K., Shinagawa, A., Sakai, K., Shinagawa, A., Sakai, C., Sakai, K., Shinagawa, A., Toya, T., Waki, K., Sakai, C., Sakai, K., Shinagawa, A., Tagawa, A., Tagami, M., Tagami, M., Tagami, M., Tagami, M., Tagami, M., Tagami, Takaki, T., Tomaru, Y., Tagawa, A., Tagawa, A., Tagawa, M., Tagawi, Y., Tagawi, Y., Tagawi, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., Tagawa, Y., T
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Arabidopsis thaliana (thale cress)
Arabidopsis thaliana
Eukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids_II; Brassicales; Brassicaceae; Arabidopsis.
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Shinn, P., Chen, H., Cheuk, R., Kim, C.J., Bowser, L., Carninci, P., Dale, J.M., Hayashizaki, Y., Ishida, J., Jones T., Kamiya, A., Kariin-Neumann, G., Kawai, J., Lam, B., Lin, J., Miranda, M., Narusaka, M., Nguyen, M., Onodera, C.S., Palm, C.J., Quach, H.L., Sakurai, T., Satou, M., Seki, M., Southwick, A., Toriumi, M., Wong, C., Wu, H.C., Yamada, K., Yu, G., Shinozaki, K., Davis, R.W., Theologis, A.
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Arabidopsis thaliana formin homology 2 (FH2)
domain-containingprotein (At1g59910) mRNA, complete cds.
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100.0%; Pred. No. 5.9e-07;
ive 0; Mismatches 0;
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/clone="J013120L23"
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Arabidopsis ORF clones
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AVGKTEDPTOPELLKELHWDKONPDAGERSMWHKI DGGSFNFOGDLARGAL FGYVARKPB
ESNSVPQNQTVSNSVPHNQTY ILDPRKSQNKAI VLKSLGMTKEEL I DLLTGEHDABESD
TLEKLAGI PAPPEBOTEI I DENGERPMTAANDSLEHI IKAVPSAFNRFUNLFAL
GSEVAQQKGSLLTLESAGNEIRARGLFWKLIEAI LEAGANRWAGTARONBEST
RKLSDVKSVDAKTTLLHFVVJEVVRSBGKRAAMNKAWMSSDNGSGBRADKSREBEGDEI F
RKLSDVKSVDAKTTLLHFVVJEVVRSBGKRAAMNKAWMSSDNGSGBRADKSREBGDEI F
ITKALBI GGGSSEPRADKSRERGENTRALGTRVFTKETKILLDQSKGKEDG
ITKLRS FFESAREBELKTYTEBQLERINGLVKKTTVYYQAGALKGRNILPQLFVIIRDFIG
MVDNAGSELARDKKQQQQRPATTVAGASSSPAETPSVAAAPQRNAVRFPILLPDPNFMS
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STSTQPVSLPFGGYNAGNALSASTPLTPGGFTTANAPFPOPPANGTSPPPPPPPPPPRAAAPPF
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EXEN Genomic Sciences Center (GSC) members carried out the collection and clustering of RAFL cDNAs (RAFL cDNA : 'R.KEN tabidopsis Full-Length cDNA') : Seki,M., Narusaka,M., Ishida,J., Satou,M., Kamiya,A., Sakurai,T., Carninci,P., Kawai,J., Hayashizaki,Y. and Shinozaki,K.
                                                                                                                                                                                                                                             The Salk, Stanford, PGEC (SSP) Consortium members constructed and sequenced the pUNI (ORF) clones using the RAFL cDNAs: Shinn, P., Chen, H., Cheuk, R., Kim, C.J., Bowser, L., Chan, M.M., Chang, C.M., Male, J.M., Jones, T., Karlin-Neumann, G., Lam, B., Lee, J.M., Lin, J.J., Miranda, M., Nguyen, M., Onodera, C.S., Palm, C.J., Quach, H.L., Southwick, A., Tang, C.C., Toriumi, M., Wong, C., Wu, H.C., Yamada, K., Yu, G., Davis, R.W., Theologis, A., and Ecker, J.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /ecotype="Columbia"
/note="This clone is in pUNI 51"
1. .270
/note="formin homology 2 (FH2) domain-containingprotein"
/codon_start=1
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Location/Qualifiers
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100.0%; Pred. No. 6.1e-07;
ive 0; Mismatches 0; Indels
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protein_id="AAQ62880.1"
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/chromosome="1"
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us-10-041-615-33.oli10.rge

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Sirran, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Boguslavkiy, L., Boukhgalter, B., Anderson, S., Barna, N., Campopiano, A., Chang, J., Chazaro, B., Choepel, Y., Colangelo, M., Collins, S., Collymore, A., Cook, A., Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Faro, S., Farreira, P., Fitzhugh, W., Gage, D., Galagan, J., Gardyna, S., Gardyna, S., Gord, S., Govette, M., Graham, L., Carad-Pierre, N., Hagos, B., Heaford, A., Morton, L., Hulme, W., Iliev, I., Johnson, R., Jones, C., Kamat, A., Karatas, A., Kalls, C., LaRocque, K., Landers, R., Mclarim, J., McCarthy, M., McGwan, P., McCarthy, M., McEwan, P., McHows, C., Norman, C., McRenan, K., McPheeters, R., Meldrim, J., McCarthy, M., McEwan, P., McRenan, Y., Murphy, T., Naylor, J., Nguyen, C., Norman, C., M., O'Connor, T., O'Donnell, P., O'Neil, D., Nibou, C., Rette, R., Rieback, M., Santos, R., Schugback, R., Stange, Thoman, J., Rogov, P., Ramon, J., Roy, A., Santos, R., Stange, Thoman, J., Stojanovic, N., Strauss, N., Subramanian, A., Tasics, R., Man, J., Yewis, S., Yende, J., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Santos, M., Santos, M., Santos, M., Santos, M., Santos, M., Santos, M., Santos, M., Santos, M., Santos, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles, M., Trayles,
                Mus musculus clone RP23-126G16, LOW-PASS SEQUENCE SAMPLING.
AC100332
                                                                                                                 Mus musculus
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
1 (Dases 1 to 59159)
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* sequencing reads that have not been assembled into

* contigs. Runs of N are used to separate the reads

* and the order in which they appear is completely

* arbitrary. Low-pass sequence sampling is useful for
identifying clones that may be gene-rich and allows

* overlap relationships among clones to be deduced.

* However, it should not be assumed that this clone

* will be sequenced to completion. In the event that

* the record is updated, the accession number will

* be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: sequence_submissions@genome.wi.mit.edu
------ Project Information
----- project name: 115119
Center clone name: 126_G_16
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Unpublished
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Web site: http://www-seq.wi.mit.edu
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   RESULT 13
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Direct Submission

Direct Submission

Direct Submission

Submitted (24-FBB-2003) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

Research, 320 Charles Street, Cambridge, MA 02141, USA

Diaza, Musbaum, C. Lander, E., Abouelleil, A., Allen, N., Anderson, S., Arachchi, H.M., Earna, N., Bastien, V., Bloom, T., Anderson, S., Dodge, S., Dooley, E., Camarata, J., Chang, J., Choepel, Y., Collymore, A., Cook, A., Cooke, P., Corring, I., Erickson, J., Faro, S., Farreira, P., FitzGerald, M., Gage, D., Galagan, J., Gardyna, S., Grahami, J., Granderst, M., Mafez, N., Hagopian, D., Hagopian, D., Hadle, Y., Marchen, E., Marchen, E., Marchen, E., Marchen, E., Marchen, C., Lindblad-Toh, K., Liu, G., Lui, A., Mabbitt, R., Maclean, C., Macdonald, P., Major, J., Manning, J., Matthews, C., McCarthy, M., Maddrim, J., Meneus, L., Mihova, T., Mlova, T., Murphy, T., Naylor, C., Nicol, R., Manning, J., Matthews, C., McCarthy, M., Naylor, J., Schauer, S., Schupback, R., Petta, R., Rise, C., Rogov, P., Ramacamy, U., Raymond, C., Retta, R., Rise, C., Rogov, P., Spencer, B., Stange-Thomann, W., Stojanovic, N., Stubbs, M., Vassiliev, H., Vourg, G., Zainoun, J., Zembek, L., Zimmer, A. and Zody, M. Wyman, D., Young, G., Zainoun, J., Zembek, L., Zimmer, A. and Zody, M. Direct Submission

Research, 320 Charles Street, Cambridge, MA 02141, USA

No May So, 2003 this sequence version replaced gi:28475865.

All repeats were identified using RepeatMasker:

Smit, A.F.A. & Green, P. (1996-1997)
                                                                                                                                                                                                                                             Birren, B., Nusbaum, C., Lander, E., Abouelleil, A., Allen, N., Ander, B., Nusbaum, C., Lander, E., Abouelleil, A., Allen, N., Anderson, S., Arachchi, H.M., Barna, N., Bastien, V., Bloom, T., Anderson, S., Boukhgalter, B., Camarata, J., Chang, J., Choepel, Y., Bouslay, E., Cook, P., Corrum, B., DeArellano, K., Dolaz, J.S., Dooley, F., Dorrie, L., Erickson, J., Faro, S., Ferreira, P., Fitzderald, M., Gage, D., Galagan, J., Gardyna, S., Graham, L., Grand-Pierre, N., Hafez, N., Hagopian, D., Hagos, B., Kamat, A., Kartsas, A., Kells, C., Landerst, M., Macloan, C., Indblad-Toh, K., Liu, G., Lui, A., Mabbitt, R., Maclean, C., Macdonald, P., Major, J., Manning, J., Matthews, C., McCarthy, M., Meldrim, J., Minova, T., Mlenga, V., Murphy, T., Naylor, J., Nguyen, C., Nicol, R., Norbu, C., O'Connor, T., O'Donnall, P., O'Neil, D., Ollver, J., Peterson, K., Phunkhang, P., Pierre, N., Ramasamy, U., Raymond, C., Retta, R., Rise, C., Rogov, P., Roman, J., Schauer, S., Schupback, R., Semat, S., Setupbs, M., Talamas, J., Tesfaye, S., Theodore, J., Topham, K., Travers, M., Vassiliev, H., Venkataraman, V.S., Viel, R., Vo, A., Wilson, B., Wu, X., Wassiliev, H., Venkataraman, V.S., Viel, R., Vo, A., and Zody, M. Direct Submission.
HTG; HTGS PHASEO.

Mus musculus (house mouse)

Mus musculus

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 78244)
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Center: Whitehead Institute/ MIT Center for Genome Research
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Contact: sequence_submissions@genome.wi.mit.edu
                                                                                                                                                      Birren, B., Nusbaum, C. and Lander, E. Mus musculus chromosome 8, clone RP23-439N24
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Center clone name: 439_N_24
                                                                                                                                                                                                                    Unpublished
2 (bases 1 to 78244)
  KEYWORDS
SOURCE
ORGANISM
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Mus musculus chromosome 8 clone RP23-439N24 map 8, LOW-PASS
SEQUENCE SAMPLING.
AC140499.2 GI:31075328
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larity 100.0%; Pred. No. 7.2e-07;
Conservative 0; Mismatches 0;
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LOCUS DEFINITION ACCESSION VERSION

RESULT 14 AC140499

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and the order in which they appear is completely arbitrary. Low-pass sequence sampling is useful for identifying clones that may be gene-rich and allows overlap relationships among clones to be deduced. However, it should not be assumed that this clone will be sequenced to completion. In the event that the record is updated, the accession number will be preserved.
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AP004394 98286 bp DNA linear HTG 21-MAR-2002
OLYZA SALIVA (japonica cultivar-group) chromosome 2 clone
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AP004394.1 GI:17402600
HTG, HTGS PHASE2.
OLYZA SALIVA (japonica cultivar-group)
OLYZA SALIVA (japonica cultivar-group)
Fikaryota; Viridiplantae; Streptophyte; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzeae; Oryza. Gaps ö 3.0%; Score 33; DB 2; Length 78244; 100.0%; Pred. No. 7.3e-07; ive 0; Mismatches 0; Indels 1: gap of 100 bp
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REFERENCE

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Sasaki.T.", Matsumoto,T. and Yamamoto,K.
Direct Submission

Submitted (05-DEC-2001) Takuji Sasaki, National Institute of
Direct Submission

Aprobiological Sciences, Rice Genome Research Program; Kannondai
2-1-2, Tsukuba, Ibaraki 305-8602, Japan
(E-mail:tsasaki@mias.affrc.go.jp, URL:http://rgp.dna.affrc.go.jp/,
Tel:81-298-38-7441, Far:81-298-38-7468)

The nucleotide sequence of this BAC clone was generated by
combining Monsanto and RGP-Japan sequencing data.

NOTE: It currently consists of 1 contigs. Gaps between the contigs
are represented as runs of N. The order of the gaps between them
to be correct as given, however the sizes of the gaps between them
are based on estimates that have provided by the submitter. This
sequence will be replaced by the finished sequence as soon as it is
available and the accession number will be preserved.

* NOTE: This is a 'working draft' sequence.

* This sequence will be replaced

* by the finished sequence as soon as it is available and

* the accession number will be preserved.
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/organism="Cryza sativa (japonica cultivar-group)"

/organism="Opponent DNA"

/cultivar="Nipponent"

/db_xref="taxon:39947"

/chromosome="2"

/clone="0J1118_C06"
Sasaki,T., Matsumoto,T. and Yamamoto,K.
Oryza sativa nipponbare(GA3) genomic DNA, chromosome 2, BAC
clone:OJ1118 C06
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Search completed: February 21, 2004, 22:57:51 Job time : 4364 secs

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AUTHORS TITLE

Mon Feb 23 11:38:26 2004

018-11-041-61-41-01-01-81

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sw model nucleic search, using OM nucleic February 21, 2004, 19:27:14; Search time 483 Seconds (without alignments) 9710.167 Million cell updates/sec Run on:

US-10-041-615-33 1104 1 atgataaaactaggccctta......gtgtcatttgctttatgact 1104 Title: Perfect score:

Sequence:

OLIGO NUC Gapop 60.0 , Gapext 60.0 Scoring table:

3373863 seqs, 2124099041 residues Searched:

0.7 Word size : 1958023 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

N Geneseq 29Jan04:*

1: geneseqn1980s:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	cDNA e	_	7 Human	Aas98131 Human DNA	_	_	9 DNA en	Human	Human		Human	1 Probe	Human	Aai47743 Probe #16	Human	Probe	Human	Aak15953 Human bra	7 Human	Aai08137 Probe #81	ρ	6 Probe #	Aba54915 Human foe
ΙĐ	ABS64723	ADC86840	AAK76477	AAS98131	ABK94922	AAS98111	AAS78869	AAS42840	AAS30791	AAS98061	ABA15489	AA122451	ABA67527	AA147743	ABA49623	ABA34608	AAK41698	AAK15953	ABS41287	AAI08137	ABS15705	AA113216	ABA54915
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ALIGNMENTS

G protein coupled receptor related protein; ss; gene; human; GPCR; cardiomyopathy; atherosclerosis; diabetes; cancer; stroke; von Hippel-Lindau syndrome; Alzheimer's disease; tuberous sclerosis; hypercalcaemia; Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome; multiple sclerosis; ataxia-telangiectasia; leukodystrophy; addiction; anxiety; depression; pain; obesity; Crohn's disease; osteoporosis; heemophila; asthma; inflammatory bowel disease; infertility; hypertension; scleroderma; arthritis; human immunodeficiency virus; autoimmune disease; HIV; infection; graft-versus-host disease. cDNA encoding human GPCR16 protein. ABS64723 standard; cDNA; 1104 BP. 03-JAN-2001; 2001US-0259552P. 09-JAN-2001; 2001US-0260544P. 20-MAR-2001; 2001US-0277405P. 03-JAN-2002; 2002WO-US000056. (first entry) (CURA-) CURAGEN CORP. WO200264793-A2. Homo sapiens. 22-AUG-2002. 15-NOV-2002 ABS64723; RESULT 1 ABS64723

Casman SJ, Edinger SR, Ellerman K, Smithson G, Kekuda R; Muralidhara P;

WPI; 2002-643487/69. P-PSDB; ABG32286.

New isolated G protein coupled receptor polypeptides and polynucleotides, useful in gene therapy, particularly for treating or preventing cardiomyopathy, atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer.

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                                                                   Thus interior relates to a new isolated or protein coupled relative to a new isolated or protein coupled relative to a new isolated or are useful for treating, preventing or alteviating a GPCRX-associated disorder or a pathological state in a subject, particularly a human. In particular, the disorder is cardiomyopathy, atherosolatosis, diabetes, or a disorder related to cell signal processing and metabolic pathway or disorder related to cell signal processing and metabolic pathway or a disorder related to cell signal processing and metabolic pathway and a disorder related to cell signal processing and metabolic pathway or a disorder related to cell signal processing and metabolic pathway altered levels of GPCRX, particularly cancer. The GPCRX mucleic acid and cell appearant of prophylactic applications for disorders associated with a lererad levels of general pathological in the manufacture of a medicament for therapeutic or prophylactic applications for disorders associated with aberrant GPCRX expression or activity, e.g. von Hippel-Lindau syndrome, altered signal and states, attached signal and syndrome, and sease, serebral palsy, epilepsy, certain syndrome, multiple sclerosis, ataxia-telangicatasia, lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangicatasia, chypartension, scleroderma, haemophila, asthma, arthritis, human immunodeficiency virus; autoimmune disease, HIV viral, fungal, bacterial or protein is useful in gene therapy for treating the above conditions. The polypeptides can be used as immunogens to produce antibodies and as vaccines. The publications, or graft-versus -host protein special analysis of various human dispersents the above conditions. Chromosome mapping, tissue typing, preventive medicine, and dispersent special analysis of various human disorders, as well as in chirantical analysis of various human dispersents the above conditions in the present sequence represents the above conditions in the present sequence represents the above conditions in the protein coupled receptor relate
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guanosine triphosphate-binding protein coupled receptor; gene therapy
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P-PSDB; ADC86841.
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Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
            cytostatic; gene therapy; vaccine; metastasis; ds
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08-SEP-2000; 2000US-0231244P.
08-SEP-2000; 2000US-0231244P.
08-SEP-2000; 2000US-0231413P.
08-SEP-2000; 2000US-0231413P.
12-SEP-2000; 2000US-023298P.
14-SEP-2000; 2000US-0232398P.
14-SEP-2000; 2000US-0232399P.
14-SEP-2000; 2000US-0232399P.
14-SEP-2000; 2000US-0232399P.
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                                      Homo sapiens.
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                                                                                     The invention relates to a novel polynucleotide encoding a guanosine triphosphare-binding protein coupled receptor (GPCR). A polynucleotide of the invention may have a use in gene therapy. The polynucleotide and polypeptide are useful for preparing a composition for treating a patient in need of increased or suppressed activity or expression of the guanosine triphosphare-binding protein coupled receptor. The polynucleotide sequences shown in ADC85548-ADC87616 encode GPCR's of the
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          New polynucleotide, useful for preparing a composition for treating a patient in need of increased or suppressed activity or expression of the guanosine triphosphate-binding protein coupled receptor.
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                                                                                                                                                                                                        Sequence 4319 BP; 1058 A; 1049 C; 1170 G; 994 T; 0 U; 48 Other;
                                                                                                                                                                                                                               41.8%; Score 461; DB 9; Length 4319; 99.8%; Pred. No. 9.4e-217; ive 0; Mismatches 0; Indels 1
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                                                             Claim 1; SEQ ID NO 1293; 28pp; English
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AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)

amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
activity, and can be used in gene therapy and vaccine production. (I)

controlled and polynucleotides may be used in the prevention, diagnosis and
treatment of diseases associated with inappropriate (I) expression. For
example, they may be used to treat disorders associated with decreased
controlled the activity of mutations or deletions in a patient's genome
that affect the activity of mutations or deletions in a patient's genome
that affect the activity of mutations or deletions in a patient's genome
that affect the activity of mutations or deletions in a patient's genome
concerns and post of (I) by expressing inactive proteins or to
polynucleotides may be used to produce the secreted (I), by inserting the
concern acids into a host cell and culturing the cell to express the
concerns and cancer metastesses of haematopoietic-related diseases, especially
concerns and cancer metastesses of haematopoietic-derived cells. AAK64703
concerns and cancer metastesses of haematopoietic antigen genomic
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concerns and cancer metastesses of haematopoietic antigen genomic
concerns and cancer metastesses of haematopoietic antigen genomic
concerns from the present invention. AAK54942 to AAK84950 and AAM83169
concerns sequences used in the exemplification of the present invention GCCATCTGGACCTTGGTGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAG 516 GCTGTGTCTGACCTGTTCACCGTGGCCTTACCGGGAAGGGTGGTGTTGTGTGTTGTGCTG 552 gacricca gride criming a canada a caracta canada ca a canada canada a 336 GACACCTACGGGGGGGTCTACCTCATGGCCTGTGAGCGTGGACCATTACCCAGCTGTG 396 GTCTGTGCCCACTGGGCCCGCGCCTCCGCACGGCTGCCGCCCAGGCTGGTCTGCGTG 73.1 Nucleic acids encoding human immune/hematopoietic antigen polypeptides, useful for preventing, diagnosing and/or treating cancers and metastasis. CCCCTCATGGTCCTGGTGGCCTTTGCCATTGTGTGGGCCAGTGGGATCATCTG ceecheeresechaecresecrecaresagnacaecacaresagreactesecre 157 TGCCTTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTG 97 CGCTCTCTGTTCTACACACCCCTCCTGGTCTTCAGTGCCCTGGGAAACAICCTTGCCCTT 373 GGCTCTCTGTTCTACAGGCCTCCTGGTGTTCAGTGCCTGGGAAACATCCTTGCCTT 217 GCTGTGTCTGACCTGCTGTTCACCGTGGCTTTACCGGGAAGGGTGGTGTTATGTGCTG Disclosure; SEQ ID NO 31289; 3071pp + Sequence Listing; English. 0; Indels 1; Sequence 9409 BP; 2123 A; 2163 C; 2259 G; 2864 T; 0 U; 0 Other; Query Match
Best Local Similarity 99.8%; Pred. No. 9.4e-217;
Matches 581; Conservative 0; Mismatches 0; Indels Ruben SM; 05-JAN-2001; 2001US-0259678P. (HUMA-) HUMAN GENOME SCI INC. Rosen CA, Barash SC, WPI; 2001-483426/52. 493 277 553 613 397 672 457 732 517 792 577 337 852 a a 8 8 8 셤 ò $\texttt{\#X} \texttt{\#X$ ઠે ద δ 셤 ઠે ઠ

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The invention relates to an isolated polypeptide encoded by a nucleic acid molecule that is at least 80% identical to the G protein-coupled (GPCN) polymuclectides included in the specification. Also included are probes based on the GPCN sequence (including antiesnes probes), a host cell comprising an expression vector comprising the GPCN sequence, and methods of identifying modulators of the polypeptides. The polypeptides are useful for identifying modulators of the polypeptides. The polypeptides are useful for repressors, agonists or antagonists of the novel GPCN polypeptides in cluding the GAL4 polypeptide. The antibodies and nucleic acid probes as described above can be used to detect the presence of the polypeptides and nucleic acids and are used to diagnose a variety of disease, or anyotrophic lateral solerosis, asthma, atherosclerosis, basal cell carcinoma, breast carcinoma, cardiomyopathy, chondrosarcoma, chronic obstructive pulmonary disease, (cronic diseases, depression, epilepsy, macular degeneration, lymphoma, melanoma, multiple sclerosis, and many other diseases listed in the specification. The probes and antibodies are also useful for diagnosing cognition and memory disorders, pain perception release disorders, cardiovascular activity disorders, pain perception
                                                                                                                                                                                                                                                                                                          Human; G protein-coupled receptor; GPCR; ss; GAL4; galanin receptor; Alzheimer's disease; amyotrophic lateral sclerosis; asthma; atheroselerosis; basal cell carcinoma; breast carcinoma; cardiomyopathy; chondrosarcoma; chronic obstructive pulmonary disease; Crohn's disease; depression; epilepsy; macular degeneration; lymphoma; melanoma; multiple sclerosis; osteoarthritis; osteoporosis; Parkinson's disease; psoriasis; rheumatoid arthritis; osteoporosis; Parkinson's disease; tuberculosis; cognition disorder; memory disorder; anorexia; hormonal release disorder; cardiovascular activity disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel G protein-coupled receptor polypeptides including galanin receptor polypeptides useful for identifying modulators that are useful for treating Alzheimer's disease, psoriasis, melanoma, multiple sclerosis,
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TCCTGCTATATGAAGATCACCTGGAAGCTGTGCAGCACAGCT 678
                                        912 rocrecrarardadarcaccredaagcrerecaccaccacci 953
                                                                                                                                                                                                                                                                      DNA for potential G protein-coupled receptor #88.
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                                                                                                                     AAS98131/c
ID AAS98131 standard; cDNA; 1001
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disorders, obesity, diabetes, Alzheimer's disease. Preferably, compounds that decrease or increase the expression of galanin receptor (GAL4) can be used to treat obesity, diabetes, hyperlipidaemia and stroke. The GPCR nucleic acid is useful for treating the above mentioned disorders by gene therapy techniques. The present sequence is a novel GPCR polynucleotide of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCATGGTCCTGGTGGCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCCTGTCT
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                                                                                                                                                                                                                                                                               Length 1001;
                                                                                                                                                                                                                    Sequence 1001 BP; 190 A; 315 C; 311 G; 185 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                               Score 458; DB 6; Length 10
Pred. No. 2.8e-215;
0; Mismatches 0; Indels
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Best Local Similarity 99.8
Matches 578, Conservative
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30-NOV-2001; 2001WO-US047004.
                            30-NOV-2000; 2000US-00728952.
                                                  WPI; 2002-508509/54.
P-PSDB; ABG66698.
                                        Goodrich I
V, Ujwal N
                                  (HYSE-) HYSEQ INC.
         WO200244340-A2
   Homo sapiens.
               06-JUN-2002
                                        Tang YT,
Yamazaki
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The invention relates to human novel polymucleotides and associated polypeptides. The polymucleotides and polypeptides are useful for treating inflammatory conditions such as arthritis, neptril for treating inflammatory conditions such as arthritis, neptril for disease, ischaemia-reperfusion injury, shock, sepsis, immune responses and cancer and for promoting wound healing. The sequences are used to induce the proliferation of neural cells and regeneration of nerve and brain tissue, and are useful for the treatment of central and peripheral nervous system diseases and neuropathies, such as Alzhaimer's disease, Parkinson's disease, Huntington's disease and amyotrophic lateral sclerosis. The sequences are involved in chemotactic or chemokinetic activity, regulation of haematopoiesis, treatment of myeloid or lymphoid cell disorders and platelet disorders such as thromborytopenia, regeneration of bone, cartilage, treadment igament and/or nerve tissue cell disorders and platelet disorders such as thromborytopenia, regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth tissue repair, healing of burns, incisions, ulcers, treatment of osteoprorsis, osteoarthritis, bone degenerative disorders and periodontal disease. The sequences of the invention are also useful for gut protection or regeneration and treatment of lung or liver fibrosis, including severe combined immunodeficiency (SCID), bacterial or fungal infections, allergic conditions such as asthma, thrombolysis or thrombosis and coagulation disorders. Sequences ABK94890-ABK94892 represent human companies and coagulation disorders. Sequences and the novel polymucleotides of the invention Novel nucleic acids and polypeptides for diagnosis, treatment of inflammatory, autoimmune, nervous system, myeloid or lymphoid cell disorders, cancer and promoting wound healing. Claim 1; Page 403-404; 672pp; English.

Length 1526; Sequence 1526 BP; 282 A; 458 C; 458 G; 328 T; 0 U; 0 Other;

ACACCTACGGGGGGGTCTACCTCATGGCCTGTGAGCGTGGACCATTACCCAGGTGGG 397 GCTCTCTGTTCTACACACCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTTT 157 481 217 541 277 crerercreacerecreacerescerracescancescancerererrarerecres 601 GCTCCAGCTGGCCTTTCGGCAAGGGGCTCTGCAGGCTGACGGCGTTTGTGCTCTACACCG 337 661 GCTCCAGCTGGCCTTTCGGCAAGGGGCTCTGCAGGCTGACGCGCGTTTGTGCTCTACACCG GCCTTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTGG CTGTGTCTGACCTGCTGTTCACCGTGGCCTTACCGGGAAGGGGTGGTGTTATGTGCTGG Genericiationacaeceerecresistational GCCTTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACCTGG Gaps Ξ, 37.0%; Score 409; DB 6; Length 15: 99.7%; Pred. No. 4.1e-191; ive 0; Mismatches 1; Indels Matches 579; Conservative Similarity 98 422 158 482 218 542 602 338 278 Query Match Local d ð d ò g ద ò à δ

780 517 840 577 900 637 960 457 781 ccarcridgaccriedrecrecrecadacdareccrirecrcridareccardaccadec 662 ACACCTAC-GGGGGGTCTACCTCATGGCCTGTGTGAGCGTGGACCATTACCCAGCTGTGG CCATCTGGACCTTGGTGCTGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAGC cecreerescaascrescrecaresarasascascaresarcascrecrescres CCCTCATGGTCCTGGCCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCCTGT cecrearderecrearedeerringeearrederrerereseeceagidadaareareer Terrendeceaerreaggeceaegeerreacheaerrageceaeceaegerragearerag 961 cerecrarardaadarcaceredaadererededacacer 1001 678 CCTGCTATATGAAGATCACCTGGAAGCTGTGCAGCACAGCT 398 721 458 518 841 578 901 638 g 임 g ò д ∂ ò ጵ à

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Wang

Wang J,

Asundi V,

Zhou P, RT;

Liu C, 2 Drmanac F

Α¥,

RESULT 6

BP. AAS98111 standard; DNA; 330

AAS98111;

12-MAR-2002 (first entry)

DNA for potential G protein-coupled receptor #68. Human

Human; G protein-coupled receptor; GPCR; ds; GAL4; galanin receptor; Alzheimer's disease; amyotrophic lateral sclerosis; asthma; atcherosclerosis; basal carcinoma; breast carcinoma; carcinoma; carcinoma; carcinoma; carcinoma; carcinoma; carcinoma; chronic obstructive pulmonary disease; Crohn's disease; depression; epilepsy; macular degeneration; lymphoma; melanoma; multiple sclerosis; oercenarthritis; osteoporosis; parkinson's disease; psoriasis; rheumatoid arthritis; schizophrenia; ulcerative colitis; tuberculosis; cognition disorder; memory disorder; anorexia; hormonal release disorder; cardiovascular activity disorder; pain perception disorder; ostelyvascular activity disorder; hyperlipidaemia; stroke; gene therapy. AAAS 98111
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Homo sapiens.

WO200185791-A1.

15-NOV-2001.

11-MAY-2001; 2001WO-US015332.

11-MAY-2000; 2000US-0203217P. 18-MAY-2000; 2000US-0205945P.

(LIFE-) LIFESPAN BIOSCIENCES INC.

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Pritchard

Burmer G, Fabre-Suver C,

WPI; 2002-066595/09.

Brown JP, Miller M,

Novel G protein-coupled receptor polypeptides including galanin receptor polypeptides useful for identifying modulators that are useful for treating Alzheimer's disease, psoriasis, melanoma, multiple sclerosis, stroke

Claim 2; Page 83; 144pp; English.

The invention relates to an isolated polypeptide encoded by a nucleic acid molecule that is at least 80% identical to the G protein-coupled (GPCR) polynucleotides included in the specification. Also included are probes based on the GPCR sequences (including antisense probes), a host

MON Feb 43 11:38:46

us-10-041-615-33.01110.rng

cell comprising an expression vector comprising the GPCR sequence, antibodies raised against the polypeptides, and methods of identifying modulators of the polypeptides. The polypeptides are useful for identifying modulator compounds which function as modulators, activators, represence, agonists or antagonists of the novel GPCR polypeptides including the GAL4 polypeptide. The antibodies and nucleic acid probes as confidentially polypeptide. The antibodies and nucleic acid probes of an nucleic acids and are used to diagnose a variety of diseases, an unbedders in which GPCRs are involved e.g., Alzheimer's disease, anyotrophic lateral sclerosis, astuma, atherosclerosis, basal cell carcinoma, breast carcinoma, cardiomyopathy, chondrosarcoma, chronic carcinoma, breast carcinoma, cardiomyopathy, chondrosarcoma, chronic carcinoma, breast carcinoma, cardiomyopathy, chondrosarcoma, chronic carcinoma, breast carcinoma, cardiomyopathy, chondrosarcoma, chronic carcinoma, breast carcinoma, falsease, depression, epilepsy, macular degeneration, lymphoma, melanoma, multiple sclerosis, costeoarthritis, osteoporosis, Parkinson's disease, psoriasis, rheumatoid diseases listed in the specification. The probes and antibodies are also useful for diagnosing cognition and memory disorders, pain perception classes disorders, cardiovascular activity disorders, pain perception classocares or increase the expression of galanin receptor (GAL4) can be used to treat obesity, diabetes, hyperlipidaemia and stroke. The GPCR nucleic acid is useful for treating the above mentioned disorders by gene therapy techniques. The present sequence is a novel GPCR polymucleotide.

Sequence 330 BP; 46 A; 101 C; 108 G; 75 T; 0 U; 0 Other;

redescrescercresearces reserved reserve 61 TGGGGCCCGCGCCCCCCCACCACCTCCGCCCAGGCTGGTCTCGCGTGGCCATCTGGACC 120 528 180 240 AAGCTGGCTGCATGGAGTACAGCAGCATGAGTCAGTCCTCGGGCTGCCCCTCATGGTC 588 CTGGTGGCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCCTGTCCTGCTATATG 648 1 GGGGTCTACCTCATGGCCTGTGTGAGCGTGGACCATTACCCAGCTGTGGTCTGTGCCCCCC 60 TTGETGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAGCCGCTGGTGGCC 349 GGGGTCTACCTCATGGCCTGTGAGCGTGGACCATTACCCAGCTGTGGTCTGTGCCCAC TTGÈTGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCCATGACCAAGCCGCTGGTGGC ô Query Match 28.8%; Score 318; DB 6; Length 330; Best Local Similarity 100.0%; Pred. No. 3.1e-146; Matches 318; Conservative 0; Mismatches 0; Indels AAGATCACCTGGAAGCTG 318 AAGATCACCTGGAAGCTG 666 409 469 121 529 181 589 649 301 g 셤 ద g ò g ଚ 원 ઠ 8 δ

1; chromosome mapping; gene mapping; gene therapy; forensic; supplement; medical imaging; diagnostic; genetic disorder; DNA encoding novel human diagnostic protein #14673 AAS78869 standard; cDNA; 1771 BP (first entry) 13-FEB-2002 AAS78869; Human; food

30-MAR-2001; 2001WO-US008631. 11-0CT-2001

31-MAR-2000; 2000US-00540217. 23-AUG-2000; 2000US-00649167.

(HYSE-) HYSEQ INC

Tang YT; Drmanac RT, Liu C,

WPI; 2001-639362/73 P-PSDB; ABG14682 New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity.

Claim 1; SEQ ID NO 14673; 103pp; English.

The invention relates to isolated polymucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PGN) primers, and for chromosome and gene mapping, and in recombinant production of (II). The polymucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in game therapy techniques to restore normal crivity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations in diagnostics for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences AAS64197-AAS94564 represent novel human diagnostic conding sequences of the invention. Note: The sequence data for this pattent did not appear in the printed specification, but was obtained in partner of the condition of the condition and the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 1771 BP; 313 A; 531 C; 519 G; 407 T; 0 U; 1 Other;

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Gaps

Length 1771;

982 graccirccacacadardaccacacacacararraracaracaratarararagacaragae 536 357 476 297 861 416 981 801 921 298 AAGGGGCTCTGCAGGCTGACGGCGTTTGTGCTCTACACCGACACCTACGGGGGGGCTCTAC 477 GCTGCAGACGATGCCCCTTGCTCTTGATGCCCATGACCAAGCCGCTGGTGGGCAAGCTGGC 238 ACCOTGCCCTTACCGGGAAGGGTGGTGTTATGTGCTGGGCTCCAGCTGGCCTTTCGGC 358 CTCATGGCCTGTGAGCGTGGACCATTACCCAGC-TGTGGTCTGTGCCCCACTGGGGCCC 417 GCGCCTCCGCACGGCTGGCCGCCCAGGCTGGTCTGCGTGGCCATCTGGACCTTGGTGCT Query Match
25.3%; Score 279; DB 5; Length 17
Best Local Similarity 99.4%; Pred. No. 5.4e-127;
Matches 499; Conservative 0; Mismatches 2; Indels 셤 8 g ઠ 셤 ઠે 셤 à 셤 à

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042 GCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAGCCGCTGGTGGGCAAGCTGGC

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WO200175067-A2 Homo sapiens.

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                Human, G-protein coupled receptor; GPCR; mental disorder; schizophrenia; attention deficit disorder; anxiety; depression; bipolar disorder; ss; metvological disorder; Huntington's disease; dementia; obseity; anorexia; metabolic disorder; Parkinson's disease; Tourette's syndrome; thrombosis; type 2 diabetes; cardiovascular disorder; myocardial infarction; cancer; cardiomyopathy; anheroscierosis; human imminodeficiency virus; HIV; viral infection; immunostimulant; neuroleptic; nootropic; tranquiliser; antidepressant; anorectic; PCR primer; gene therapy.
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                                            656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequences AAS42806-AAS42926 represent cDNA molecules and PCR primers for cDNA molecules encoding human G-protein coupled receptor (GPCR) polypeptides. The protein and DNA sequences of the invention can be used to identify compounds which bind to GPCR polypeptides and in screening
 CTGCATGGAGTACAGCAGCATGGAGTCAGTCCTCGGGCTGCCCCTCATGGTCCTGGTGGC
                                           CITTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCCTGTCCTGCTATATGAAGATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated nucleic acid encoding a new G-protein coupled receptor polypeptide for detecting receptor modulators that can treat mental disorders, such as schizophrenia, anxiety, depression, or obesity.
                                                                                                                                                                                                                                      Human G Protein-Coupled Receptor (GPCR) cDNA #35.
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                                                                                       CTGGAAGCTGTGCAGCACAGCT
                                                                                                                                                                    AAS42840 standard; cDNA; 536 BP.
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23-FEB-2000; 2000US-0184303P.
23-FEB-2000; 2000US-0184304P.
23-FEB-2000; 2000US-0184397P.
02-MAR-2000; 2000US-0184397P.
03-MAR-2000; 2000US-01886457P.
09-MAR-2000; 2000US-0188681P.
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23-UUN-2000; 2000US-0213861P.
11-UUL-2000; 2000US-0217369P.
11-UUL-2000; 2000US-0217370P.
14-UUL-2000; 2000US-0218337P.
20-UUL-2000; 2000US-0218492P.
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for compounds that modulate GPCR activity. By screening a human subject thor the presence of mutations in GPCR DNA, a GPCR related disorder or a genetic predisposition can be diagnosed. The sequences can also be used for treatment and prevention of mental disorders such as schizophrenia, attention deficit disorder, anxiety, depression, demental and bipolar disorder, neurological disorders such as Huntington's disease, Parkinson's disease and Tourette's syndrome, metabolic disorders such as thrombosis, moccardial infeation, cardiovascular disorders such as thrombosis, myocardial infeation, cardiomyopathy and atherosclerossis, viral infections caused by HIV and cancers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 176; DB 4; Le
Pred. No. 3.4e-76;
0; Mismatches 1;
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2000US-0187582P.
2000US-0187714P.
2000US-0187715P.
2000US-0187828P.
2000US-0187828P.
2000US-0187839P.
2000US-01878384P.
2000US-0187834P.
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AAS30791/c
ID AAS30791 standard; cDNA; 556
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Best Local Similarity 99.6%;
Matches 226; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to novel isolated nucleic acid molecules encoding G protein-coupled receptors termed nGPCR-x. nGPCR-x polymucleotides, polymulators may be used in the treatment of diseases and conditions such as infections, such as viral infections caused by HIV-1 (human immunodeficiency virus) or HIV-2, pain, cancers, metabolic and cardiovascular diseases and disorders (e.g., type 2 diabetes, obesity, anorexia, hypotension, hypotension, myocardial infarction, atheroselerosis), Parkinson's disease, and psychotic and neurological disorders, including schizophrenia, migraine, major depression, anxiety, mental disorder, manic depression, and dyskinesias, such as Huntington's listed in the specification. nGPCR-x polynucleotides and polypeptides, seell diseases or Tourette's Syndrome and many other diseases and syndromes well as nGPCR-x modulators, may also be used in diagnostic assays for souch diseases to conditions. The present sequence encodes a G protein-
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                                                                                                                                                                                                                                                                                                  Isolated nucleic acid molecules encoding G protein-coupled receptors termed nGPCR-x, useful in the treatment and diagnosis of viral infections, cancers and mental disorders (e.g. Parkinson's disease and schizophrenia).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              697 AGCAGGAAAGGACGCCACTGGCAGGCTGCCTGCTTACGCTGCTGATGCTGGTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                556 AGCAGGAAAGGACGCCACTGGCTGCTTGCTTACGCTGCTGATGCTGGTGGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                757 GIGGICIGCIICAGCCCCTACCACCICAACAICAAGCAGIICAIGGCGAGAGAGAIGCIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             496 GIGGICIGCIICAGCCCCIACCACCICAACAICAAGCAGIICAIGGCGAGAGGIAIGCIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACCTGCCATCCTGTGCCGAGGGCTTTCTTACTGTCCCTTCAGGCCACCGTGGCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
14.4%; Score 159; DB 4; Length 55
Best Local Similarity 99.5%; Pred. No. 8.2e-68;
Matches 209; Conservative 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; Page 204-205; 336pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             coupled receptor of the invention
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                                                                                                                            (PHAA ) PHARMACIA & UPJOHN CO
08-MAR-2000; 2000US-0187929P.
08-MAR-2000; 2000US-0187930P.
08-MAR-2000; 2000US-0186049P.
08-MAR-2000; 2000US-0189294P.
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                                                                                                                                                                              Wood LS;
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Best Local Similarity
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The invention relates to an isolated polypeptide encoded by a nucleic acid molecule that is at least 80% identical to the G protein-coupled (GPCR) polymucleotided in the specification. Also included are probes based on the GPCR sequences (including antisense probes), a host cell comprising an expression vector comprising the GPCR sequence.

Contibodies raised against the polypeptides, and methods of identifying modulators of the polypeptides are useful for identifying modulator compounds which function as modulators, activators, repressors, against the polypeptides and mucleic acid probes as including the GAL4 polypeptide. The antibodies and nucleic acid probes as continually are used to disense of the polypeptides and nucleic acids and are used to disense and nucleic acid probes as including the GAL4 polypeptide. The antibodies and nucleic acid probes as continually are used to disense and nucleic acid sprobes as including the GAL4 polypeptide. The antibodies and nucleic acid sprobes as continually are involved e.g., Alzheimer's disease.

Continually defense in which GPCRs are involved e.g., Alzheimer's disease.

Continually degeneration, lymphoma, melanoma, multiple sclerosis, continually disease is listed in the specification. The probes and antibodies are also artharitis, schizophrenia ulcrative collitis, tuberculosis and many other diseases listed in the specification. The probes and antibodies are also disorders, obesity, diabetes, Alzheimer's disease. Preferably, compounds that decrease or increase the expression of galanin receptor (GAL4) can be used to treat obesity, diabetes, hyperlipidaemia and stroke. The GPCR collection of the present sequence is a novel GPCR polynuclectide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              349
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel G protein-coupled receptor polypeptides including galanin receptor polypeptides useful for identifying modulators that are useful for treating Alzheimer's disease, psoriasis, melanoma, multiple sclerosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              290 CTTTCGGCAAGGGGCTCTGCAGGCTGACGGCGTTTGTGCTCTACACCGACACCTACGGGG
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multiple sclerosis; osteoarthritis; osteoporosis; Parkinson's disea; psoriasis; rheumatoid arthritis; schizophrenia; ulcerative colitis; tuberculosis; cognition disorder; memory disorder; anorexia; hormonal release disorder; cardiovascular activity disorder; pain perception disorder; obesity; diabetes; obesity; diabetes; obesity; diabetes; hyperlipidaemia; stroke; gene therapy.
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Pred. No. 3.4e-40;
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ilarity 100.0%; Pr
Conservative 0;
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2000US-0205945P.
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18-MAY-2000;
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                                                                                                                        Human; nootropic; neuroprotective; cytostatic; dermatological; virucide; immunosuppressive; antilinflammatory; anti-HyV; antibacterial; vulnerary; antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer; antirheumatic; hepatotropic; cerebroprotective; antiinflammatory; antishergic; antidiabetic; antilioer; antionulsant; antilingal; antiabarasitic; cardiant; immune discorder; cardiovascular discorder; neurological discase; infection; nephrotropic; gene therapy; vaccine; de.
                                                                                                      Human nervous system related polynucleotide SEQ ID NO 7820.
                                         ABA15489 standard; DNA; 22760 BP
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2000US-0180628P.
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26-JUL-2000;
26-JUL-2000;
14-AUG-2000;
14-AUG-2000;
14-AUG-2000;
14-AUG-2000;
14-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-AUG-2000;
22-AUG-2000;
22-AUG-2000;
                                                                                                                                                                                                             Homo sapiens
                                                                                 23-JAN-2002
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                                                            ABA15489;
                             ABA15489
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Homo sapiens.

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Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human Hela cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.8%; Score 31; DB 4; Length 232; 100.0%; Pred. No. 0.00011; trive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human foetal liver single exon nucleic acid probe #15832.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 232 BP; 12 A; 94 C; 5 G; 119 T; 0 U; 2 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 25; SEQ ID NO 12384; 487pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                             Chen W, Rank DR;
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                                                                                                                                                                                                                                                                                                                                                                               (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                            20-UTN-2000) 2000US-0060B40B.
03-AUG-2000) 2000US-0053366.
21-SEP-2000) 2000US-02368FP.
27-SEP-2000) 2000US-023559P.
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26-MAY-2000; 2000US-0207456F.
30-UUN-2000; 2000US-0060840B.
33-AUG-2000; 2000US-00632366.
                                                                                                                                        2001WO-US000670
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Best Local Similarity 100.0
Matches 31, Conservative
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                                           WO200157278-A2.
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                                                                                           09-AUG-2001
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ABA67527
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to novel genes (ABA11004-ABA21534) and proteins (ABB14678-ABB18001) useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The mucleic acids, proteins, antibodies and (ant) agonists are useful in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and ovarian cancer and other cancers of the adrenal aland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenical; (b) immune consisting autoimmune thyroidmits, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumacoid arthritis and ulcerative colifis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing; (e) neurological diseases such as wiral, bacterial, fungal and parasatic infections. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic acids encoding 3224 human nervous system antigen polypeptides, useful for preventing, diagnosing and/or treating nervous system cancers and metastases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probe #12384 for gene expression analysis in human cervical cell sample.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22760 BP; 5353 A; 6538 C; 6154 G; 4715 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 7820; 1701pp + Sequence Listing; English.
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                                                          17-NOV-2000; 20000S-024929F.
17-NOV-2000; 20000S-024930DP.
10-DEC-2000; 2000US-025193PP.
01-DEC-2000; 2000US-025193PP.
05-DEC-2000; 2000US-025198PP.
05-DEC-2000; 2000US-025198PP.
06-DEC-2000; 2000US-0251856P.
08-DEC-2000; 2000US-0251868P.
08-DEC-2000; 2000US-0251868P.
08-DEC-2000; 2000US-0251869P.
08-DEC-2000; 2000US-0251869P.
08-DEC-2000; 2000US-0251869P.
08-DEC-2000; 2000US-0251869P.
08-DEC-2000; 2000US-0251869P.
08-DEC-2000; 2000US-0251869P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HUMA-) HUMAN GENOME SCI INC
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RESULT 12 AAI2245:

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DR. Rank

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Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human placenta.
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                                                                                                                                             Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Probe #16429 used to measure gene expression in human placenta sample.
                                                                                                                                                                                             Claim 4; SEQ ID NO 15832; 639pp + Sequence Listing; English
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100.0%; Pred. No. 0.00011;
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26-MAY-2000; 2000US-0207456P.
30-UJN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00532366.
21-SEP-2000; 2000US-023468TP.
27-SEP-2000; 2000US-023468TP.
04-OCT-2000; 2000GB-0024283.
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                                                           (MOLE-) MOLECULAR DYNAMICS INC
                                                                                        Hanzel DK, Chen W,
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
04-CCT-2000; 2000GB-00024263.
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                                                                                                                     WPI; 2001-483447/52
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nseful
                               The present invention relates to single exon nucleic acid probes (SENP). The present sequence is one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of human genetic disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; microarray; single exon probe; gene expression; breast; disease;
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                                                                                                                                                                    Match 2.8%; Score 31; DB 4; Length 232; Local Similarity 100.0%; Pred. No. 0.00011; les 31; Conservative 0; Mismatches 0; Indels
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                                                                                                                                      Sequence 232 BP; 12 A; 94 C; 5 G; 119 T; 0 U; 2 Other;
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Claim 25; SEQ ID NO 16429; 654pp; English
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21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
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2000US-0207456P.
2000US-00608408.
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Matches
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ABA49623
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information from genomic sequence. The present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at Iftp.wipo.int/pub/published_pct_sequences 8×3333333

Sequence 232 BP; 12 A; 94 C; 5 G; 119 T; 0 U; 2 Other;

0; Gaps Query Match 2.8%; Score 31; DB 4; Length 232; Best Local Similarity 100.0%; Pred. No. 0.00011; Matches 31; Conservative 0; Mismatches 0; Indels

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Search completed: February 21, 2004, 21:44:41 Job time : 487 secs

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        GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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No.
                                                                                                  Title:
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                                                                                                                                                                                                                                          Sequence 209,
Sequence 209,
                                                                                                                                                                                                                                                                                                                                                                          Sequence 5, Application US/09495714C
Patent No. 6670465
GENERAL INFORMATION:
TITLE OF INVENTION: RETINAL CALCIUM CHANNEL (ALPHA) IF-SUBUNIT GENE
FILE REFERENCE: 45499.4 (formerly 45074.6)
CURRENT APPLICATION NUMBER: US/09/495,714C
CURRENT FILING DATE: 2000-02-01
NUMBER OF SEQ ID NOS: 138
SOFTWARE: Patentin version 3.1
LENGTH: 6114
                                                                                                     Sequence 1
Patent No. Sequence 6
                                                                                                                                                                                Sequence 1
Sequence 1
                                                                                                                                                                                                               Sequence 1
Sequence 1
                             Sequence
Sequence
Sequence
Sequence
Sequence
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Sequence 4, Application US/08899595

Sequence 4, Application US/08899595

Sequence 4, Application US/08899595

SENERAL INFORMATION:

APPLICANT: Narumiya, Shuh

APPLICANT: Narumiya, Shuh

APPLICANT: Narumiya, Shuh

TITLE OF INVENTION: RHO TARGET PROTEIN HUMAN MDIA AND GENE

TITLE OF INVENTION: ENCODING SAME

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADDRESS:

ADDRESSEE: Roley & Lardner

STREET: 3000 K Street, N.W., Suite 500

CITY: Washington

STATE: D.C.

COUNTRY: USA
                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ÷
                Seguenc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.8%; Score 31; DB 4; Length 6114;
100.0%; Pred. No. 2.2e-05;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: D.C.
COUNTRY: USA
ZIP: 20007-5109
COMPUTER READABLE FORM:
WEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
SOPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
           US-09-580-923-15
US-08-979-608A-37
US-09-616-289-37
US-09-187-330-4
US-09-187-330-54
US-09-187-330-54
US-09-187-330-54
US-09-187-310-619
US-09-620-112D-619
US-09-65-617B-1
US-09-096-570-1
US-09-26-617B-1
US-09-945-283-1
US-09-807-166-1
US-09-618-166-209
US-09-618-166-209
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                                                                                                                                                                                                                                                                                                        ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 2.8
Best Local Similarity 100.
Matches 31; Conservative
                                                                                                                                                                                                                             10961
51259
51259
                               TYPE: DNA ORGANISM: Mus musculus
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NAME/KEY: misc_feature
i_LOCATION: (223)...(223)
cTHER INFORMATION: VANCO B PMP-PROBE 496.20 (ON PMP) IN EXAMPLE 16
US-09-371-489-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
2.6%; Score 29; DB 4; Length 50;
Best Local Similarity 100.0%; Pred. No. 0.00019;
Matches 29; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4, Application US/09371489

patent No. 635803

GENERAL INPORMATION:
GENERAL INPORMATION:
APPLICANT: Qingping Jiang
APPLICANT: Qingping Jiang
APPLICANT: Qingping Jiang
APPLICANT: Qingping Jiang
APPLICANT: Qingping Jiang
TITLE OF INVENTION: AREA INFRARED CHEMILUMINESCENT
TITLE OF INVENTION: ACRIDINUM COMPOUNDS AND USES THEF
FILE REFERENCE: CCDLT-258XX
CURRENT FAPPLICATION NUMBER: US/09/371,489
CURRENT FILING DATE: 1999-08-10
EARLIER APPLICATION NUMBER: 60/096,073
EARLIER APPLICATION NUMBER: 60/096,073
EARLIER FILING DATE: 1998-08-11

NUMBER OF SEQ ID NOS: 7
SOFTWARE: FastSEQ for Windows Version 3.0

SETTING DATE: AND USES TO NOS: 7
SOFTWARE: FASTSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 3; Le
6.7e-05;
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2.7%; Score 30; DB
Best Local Similarity 100.0%; Pred. No. 6.7
Matches 30; Conservative 0; Mismatches
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GENERAL INFORMATION:
                            REGISTRATION NUMBER: 29,700
REFERENCE/DOCKET NUMBER: 0494
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5399
TELERAX: (202)672-5399
TELERAX: 904136
INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS:
LENGTH: 5822 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lees, Ann M.
Lees, Robert S.
                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA to mR
ANTI-SENSE: YES
ORIGINAL SOURCE:
CREANISM: Human
US-08-899-595-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            976 TCCTCCTCC
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US-08-979-608A-12/c
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US-08-899-595-5/C

Sequence 5, Application US/08899595

Patent No. 6111072.

APPLICANT: Narumiya, Shuh
APPLICANT: Takahashi, No. 6111072uaki
ITLE OF INVENTION: ENCODING SAME
TITLE OF INVENTION: ENCODING SAME
TITLE OF INVENTION: ENCODING SAME
NUMBER OF SEQUENCES: 14
CORRESPONDENCE SIT 14
CORRESPONDENCE SIT 14
CORRESPONDENCE SIT 14
COUNTY: USA
STARE: 3000 K Street, N.W., Suite 500
CITY: Washington
COUNTY: USA
ZIP: 2000-5109
CONTY: USA
ZIP: 2000-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IEM PC Compatible
COMPUTER: IEM PC Compatible
CORRENT APPLICATION NUMBER: US/08/899,595
FILING DATE: 24-JUL-1997
CLASSIFICATION NUMBER: UP 8-242701
FILING DATE: 24-JUL-1997
CLASSIFICATION NUMBER: UP 8-242701
FILING DATE: 24-JUL-1997
APPLICATION NUMBER: UP 8-242701
FILING DATE: 25-MG-1996
FILING DATE: 25-MG-1996
FILING DATE: 25-MG-1996
FILING DATE: 25-MG-1996
FILING DATE: 25-MG-1996
FILING DATE: 25-MG-1996
FILING DATE: 25-MG-1997
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: US/08/899,595
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: UP 8-242701
FILING DATE: 26-AUG-1996
PRIOR APPLICATION NUMBER: UP 9-90170
PILING DATE: 26-AUG-1996
PRIOR APPLICATION NUMBER: UP 9-90170
PILING DATE: 25-ARR-1997
ATTORNEY/AGENT INFORMATION:
NAME: Stephen A. Bent NEGRISTRATION NUMBER: 04941/0112
REFERENCE/DOCKET NUMBER: 04941/0112
TELEENGOMMUNICATION INFORMATION:
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28..3972
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , NAME/KEY:
; LOCATION:
US-08-899-595-4
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GENERAL INFORMATION:
APPLICANT: Lees, Ann M.
APPLICANT: Lees, Ann M.
APPLICANT: Lees, Robert S.
APPLICANT: Lees, Robert S.
APPLICANT: Lees, Simon W.
APPLICANT: Lees, Simon W.
APPLICANT: Arjona, Anibal A.
TITLE OF INVENTION: PROTEINS AND THEIR USE IN DIAGNOSING AND TREATING
TITLE OF INVENTION: ATHEROSCLEROSIS
FILE REPRENCE: 1079-1040401
CURRENT APPLICATION NUMBER: US 09/517,849
PRIOR APPLICATION NUMBER: US 09/517,849
PRIOR APPLICATION NUMBER: US 08/979,608
PRIOR APPLICATION NUMBER: US 08/979,608
PRIOR FILING DATE: 1997-11-26
PRIOR FILING DATE: 1997-11-26
PRIOR PLILING DATE: 1997-10-27
PRIOR FILING DATE: 1997-06-03
NUMBER OF SEQ ID NOS: 53
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 12
LENGTH: 1362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
2.6%; Score 29; DB 4; Length 1362;
Best Local Similarity 100.0%; Pred. No. 0.0002;
Matches 29; Conservative 0; Mismatches 0; Indels
                                       MEDIUM TYPE: IBM Compatible
CONFUTER: IBM Compatible
SOFTWARE: Rescised for windows Version 2.0
SOFTWARE: ResciseD for windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/517,849
FILING DATE: O2-MAR-2000
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/979,608
FILING DATE: SC-NOV-1997
ATTORNEY/AGENT INFORMATION:
NAME: Myers, Louis
REGISTRATION NUMBER: 10/97-003001
TELEFRENCE/DOCKET NUMBER: 10/97-003001
TELEFRENCE/DOCKET NUMBER: 10/97-003001
TELEFRENCE (17/542-5070
TELEFRANCE (17/542-5070
TELEFRANCE (17/542-5070
TELEFRANCE CHARACTERISTICS:
LENGTH: 1362 base pairs
TERETHERISTICS:
LENGTH: 1362 base pairs
TERETHERISTICS:
LENGTH: 1362 base pairs
TERETHERISTICS:
LENGTH: 1362 base pairs
TERETHERISTICS:
TENGTH: 1362 base pairs
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SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-517-849-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Coding Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 12, Application US/09616289
Patent No. 6632923
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
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; LOCATION: (1)...(696)
US-09-616-289-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              972 GICTICCICC
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Arjona, Anibal A.
TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN
BINDING PROTEINS AND THEIR USES IN DIAGNOSING AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Arjona, Anibal A.
TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN
BINDING PROTEINS AND THEIR USES IN DIAGNOSING AND
TREATING ATHEROSCLEROSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : 10797-002001 (formerly 3983/59818)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.6%; Score 29; DB 4; Length 1362;
100.0%; Pred. No. 0.0002;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FESTENCE OF Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/979,608A
FILING DATE: 26-No. 6355451-1997
PRICATION NUMBER: US 60/048,547
FILING DATE: 03-JUN-1997
APPLICATION NUMBER: US 60/031,930
ATTORNEY/AGENT INFORMATION:
                                                                            TREATING ATHEROSCLEROSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    972 GICIICCICCICCICCICCICCICCICCI 1000
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STREET: 225 Franklin Street
CITY: Boston
                                                                                                                                                    ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: Coding Sequence LOCATION: 1...696; SEQUENCE DESCRIPTION: SEQ ID NO: 12: US-08-979-608A-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Myers, Louis
REGISTRATION NUMBER: 35,965
REPERENCE/DOCKET NUMBER: 10797
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 12, Application US/09517849
Patent No. 6605588
GENERAL INFORMATION
APPLICANT: Lees, Ann M.
Lees, Robert S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DENGTH: 1362 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                 COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                       NUMBER OF SEQUENCES: 42
                                                                                                                                 CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 4:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.
Matches 29; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: MA
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US-09-517-849-12/c
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; Patent No. 6605588
; GENERAL INFORMATION:
APPLICANT: Lees, Ann M.
Lees, Robert S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY:
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TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN
BINDING PROTEINS AND THEIR USES IN DIAGNOSING AND
TREATING ATHEROSCLEROSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Myers, Louis
REGISTRATION NUMBER: 35,965
REGISTRATION NUMBER: 10797-002001 (formerly 3983/59818)
TELECOMMUNICATION THORMATION:
TELEPHONE: 617/542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.6%; Score 29; DB 4; Length 1422;
100.0%; Pred. No. 0.0002;
ve 0; Mismatches 0; Indels
                                   DB 4; Length 1362;
0.0002;
hes 0; Indels
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COMPUTER READABLE FORM:
MEDIUM TYPE: DISKette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTESED FOR Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/048,547
FILING DATE: 03-UW-1997
APPLICATION NUMBER: US 60/031,930
FILING DATE: 27-NOV-1996
ATTORNEY/AGENT INFORMATION:
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                                   2.6%; Score 29; DB 100.0%; Pred. No. 0.0 tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
CITY: Boston
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LOCATION: 1...756
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
                                                                                                                                                             84 Grerrecrecrecrecrecrecrecre
                                                                                                                                                                                                                                          US-08-979-608A-13/c; Sequence 13, Application US/08979608A; Patent No. 6355451; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-517-849-13/c
; Sequence 13, Application US/09517849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 1422 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 617/542-8906
INFORMATION FOR SEQ ID NO: 13:
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Lees, Robert S.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
                                   2.6%
Best Local Similarity 100.0
Matches 29; Conservative
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Law, Simon W.
Arjona, Anibal A.
Arjona, Anibal A.
TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN
EINDING PROTEINS AND THEIR USES IN DIAGNOSING AND
TREATING ATHEROSCLEROSIS
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APPLICANT: Lees, Ann M.
APPLICANT: Lees, Robert S.
APPLICANT: Lees, Ann M.
APPLICANT: Lees, Ann M.
APPLICANT: Lees, Nobert S.
APPLICANT: Lees, Nobert S.
APPLICANT: Lees, Simon W.
APPLICANT: Lees, Simon W.
APPLICANT: Lees, Robert S.
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APPLICANT: Lees, Robert S.
APPLICANT: 
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COMPUTER: NAA

COMPUTER READABLE FORM:

MADDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSQ for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/517,849

FILING DATE: O2-MAR-2000

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/979,608

FILING DATE: 26-NOV-1997

ATTORNSY AGENT INFORMATION:

NAME: Myers, Louis

REGISTATION NUMBER: 10797-003001

TELEFRANCS/DOCKET NUMBER: 10797-003001

TELEFRANCS/DOCKET NUMBER: 10797-003001

TELEFRANCS/DOCKET 17/542-8076

TELEFRANCS/DOCKET 17/542-806

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:

SEQUENCE CHARACTERISTICS:
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2.6%; Score 29; DB 4; Le
Best Local Similarity 100.0%; Pred. No. 0.0002;
Matches 29; Conservative 0; Mismatches 0;
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
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SEQUENCE DESCRIPTION: SEQ ID NO: 13:
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CURRENT TILING DATE: 2000-07-14
PRIOR APPLICATION NUMBER: US 09/517,849
PRIOR FILING DATE: 2000-03-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Coding Sequence
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Patent No. 6632923
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STRANDEDNESS: single
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                                                      Length 1617;
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MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTESEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/517,849
FILING DATE: 02-Mar-2000
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/979,608
FILING DATE: 26-NOV-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 29; DB 4;
Pred. No. 0.0002;
                                                   Score 29; DB 4;
Pred. No. 0.0002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Myers, Louis
REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: 10797-003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.6%; Scc. 100.0%; Pred. No. v. 0; Mismatches
                                                                                            0; Mismatches
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US-09-517-849-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richards
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                         Sequence 11, Application US/09517849
Patent No. 6605588
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                Arjona, Anibal A. TITLE OF INVENTION: NOVEL LC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 617/542-8906
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 1617 base pai)
                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lees, Ann M.
Lees, Robert S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: single
                                                      2.6%; (
                                                 Query Match
Best Local Similarity 100.0
Matches 29; Conservative
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Best Local Similarity 100.
Matches 29; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Boston
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                                                                                                                                   972 GTCTTCCTCCT
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                                                                                                                                                                                                                                     RESULT 12
US-09-517-849-11/c
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            US-08-979-608A-11
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GENERAL INFORMATION:

Lees, Robert S.

Law, Simon W.

Arjona, Anibal A.

TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN

RINDING PROTEINS AND THEIR USES IN DIAGNOSING AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10797-002001 (formerly 3983/59818)
                                                                                                                                                                                                                                                                                                                                                           Length 1422;
                                                                                                                                                                                                                                                                                                                                        Score 29; DB 4; Length 172, Pred. No. 0.0002; 0; Indels
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ZIP: 02110-2804

COMPUTER READALLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Fast SEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NOTAER: US/08/979,608A
FILNG DATE: 26-NO. 6355451-1997
PRIOR APPLICATION DATA:
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FILING DATE: 03-JUN-1997
APPLICATION NUMBER: US 60/031,930
FILING DATE: 27-NOV-1996
ATTORNEY/AGENT INFORMATION:
PRIOR APPLICATION NUMBER: US 08/979,608
PRIOR FILING DATE: 1997-11-26
PRIOR PELICATION NUMBER: US 60/031,930
PRIOR FILING DATE: 1996-11-27
PRIOR PLICATION NUMBER: US 60/048,547
PRIOR FILING DATE: 1997-06-03
NUMBER OF SEQ ID NOS: 53
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13
LENGTH: 1422
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SEQUENCE DESCRIPTION: SEQ ID NO: 11:
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REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: 107
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richards
STREET: 225 Franklin Street
CITY: Boston
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Patent No. 6355451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 1617 base pairs
                                                                                                                                                                                                                                                                                                                                                       Query Match
2.6%; Soc
Best Local Similarity 100.0%; P:
Matches 29; Conservative 0;
                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Oryctolagus cuniculus
FEATURE:
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STRANDEDNESS: single
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/ LOCATION: (1)...(756)
US-09-616-289-13
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                                            Matches 29; Conservative
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GENERAL INFORMATION:
APPLICANT: Lees, Ann M.
APPLICANT: Lees, Robert S.
APPLICANT: Lees, Robert S.
APPLICANT: Lees, Robert S.
APPLICANT: Lew Jamon W.
TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN BINDING
TITLE OF INVENTION: PROTEINS AND THEIR USE IN DIAGNOSING AND TREATING
TITLE OF INVENTION: ATHEROSCLEROSIS
FILE REPRENCE: 10797-004001
CURRENT APPLICATION NUMBER: US/09/616,289
CURRENT APPLICATION NUMBER: US 09/517,849
PRIOR FILING DATE: 2000-03-02
PRIOR FILING DATE: 1997-11-26
PRIOR APPLICATION NUMBER: US 60/031,930
PRIOR FILING DATE: 1997-06-03
NUMBER OF SEQ ID NOS: 53
SOFTWARE: PRACESC for Windows Version 4.0
SEQ ID NO 48
LENGTH: 2561
TYPE: DAA
ORGANISM: Oryctolagus cuniculus
FRANKEN FOR THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF THE NAME OF TH
APPLICANT: Lees, Robert S.
APPLICANT: Law, Simon W.
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APPLICANT: Law, Simon W.
TITLE OF INVENTION: NOVEL LOW DENSITY LIPOPROTEIN BINDING
TITLE OF INVENTION: ATTEROSCIEROSIS
TITLE OF INVENTION: ATTEROSCIEROSIS
FILE REPERENCE: 10797-004001
CURRENT FILING DATE: 2000-07-14
PRIOR PPLING DATE: 2000-03-02
PRIOR APPLICATION NUMBER: US 09/517,849
PRIOR FILING DATE: 1997-11-27
PRIOR PPLING DATE: 1996-11-27
PRIOR PPLING DATE: 1996-11-27
PRIOR PPLING DATE: 1996-11-27
PRIOR FILING DATE: 1996-10-3
NUMBER: PSEQ ID NOS: 53
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 11
LEMSTH: 1617
TYPE: DNA
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2.6%; Score 29; DB 4; Sest Local Similarity 100.0%; Pred. No. 0.0002; Matches 0; Mismatches 0
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Patent No. 6632923
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; LOCATION: (246)...(1895)
US-09-616-289-48
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NAME/KEY: CDS

; LOCATION: (1)...(951)

US-09-616-289-11
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Length 2561;

Query Match Best Local Similarity

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GENERAL INFORMATION:
APPLICANT: Kawai, Shinji
APPLICANT: Takeshita, Sunao
APPLICANT: Okazaki, Makoto
APPLICANT: Amann, Egon
TITLE OF INVENTION: Bone-Related Carboxypeptidase-Like
TITLE OF INVENTION: Protein and Process for its Production
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 3728;
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ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & CITY: Washington Street, N.W.

CITY: Washington Street, N.W.
ZIP: 2005-3315
COMPUTER: D.C.
COWNTRY: B.C.DOS/WS-DOS
COMPUTER: TBM PC COMPATIBLE
COMPUTER: PatentIn Release #1.0, Version #1.25
COMPUTER: DatentIn Release #1.0, Version #1.25
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/111,939
FILING DATE: 28-AUG-1993
ATTORNEY AGENT INPORMATION:
APPLICATION NUMBER: JP 230029/92
FILING DATE: 28-AUG-1992
ATTORNEY AGENT INPORMATION:
NAME: POTTER NUMBER: 33,694
REGISTRATION NUMBER: 33,694
REGISTRATION NUMBER: 33,694
REGISTRATION NUMBER: 33,694
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2.6%; Score 29; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 0.0002;
Matches 29; Conservative 0; Mismatches 0;
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STRAIN: osteoblastic cell line MC3T3E1
Sequence 1, Application US/08111939
Patent No. 5460951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: CDNA to MENA
ORIGINAL SOURCE:
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TYPE: nucleic acid
STRANDEDNESS: double
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; LOCATION:
US-08-111-939-1
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Search completed: February 21, 2004, 23:47:00 Job time : 115 secs

us-10-041-615-33.01i10.rnpb

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RESULT 1
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Sequence 1619, Ap
Sequence 1619, Ap
Sequence 40, Appl
Sequence 35, Appl
Sequence 64, Appl
Sequence 90, Appl
Sequence 19928, A
Sequence 5532, Ap
Sequence 5532, Ap
Sequence 1716, Ap
Sequence 27614, A
Sequence 1766, A
                                                                                                                   February 21, 2004, 21:36:35; Search time 468 Seconds (without alignments) 8260.289 Million cell updates/sec
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Copyright (c) 1993 - 2004 Compugen Ltd.
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14 US-10-017-16-1619

15 US-01-02-27-98-1293

10 US-09-728-952-40

10 US-09-791-932-35

11 US-09-801-944B-64

10 US-09-864-761-19928

10 US-09-864-761-19928

10 US-09-864-761-3149

10 US-09-864-761-3149

10 US-09-864-761-3149

10 US-09-864-761-3149

10 US-09-864-761-27614

10 US-10-020-386-17166

10 US-10-020-386-17166

10 US-10-020-386-17166
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Gapop 60.0 , Gapext 60.0
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Sequence 17651, A Sequence 1021, Ap Sequence 1021, Ap Sequence 1031, App Sequence 1031, App Sequence 5679, Ap Sequence 21679, Ap Sequence 21817, A Sequence 21, App Sequence 24, App Sequence 24, App Sequence 25, App Sequence 26, App Sequence 26, App Sequence 26, App Sequence 26, App Sequence 26, App Sequence 27, App Sequence 27, App Sequence 21, App Sequence 21, App Sequence 21, App Sequence 44115, A Sequence 119, App Sequence 41115, A Sequence 119, App Sequence 11, App Sequence	1306
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ALIGNMENTS

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10-041-615-33 equence 33, Application US/10041615 equence 33, Application US/10041615 equence 33, Application US/10041615 ENERAL INFORMATION: ENERAL INFORMATION: APPLICAMT: Gamen, Stacie J APPLICAMT: Edinger, Shlomit R APPLICAMT: Eleman, Karen APPLICAMT: Eleman, Karen APPLICAMT: Eleman, Glennda APPLICAMT: Endigaru, Muralidhara APPLICAMT: Padigaru, Muralidhara APPLICAMT: Padigaru, Muralidhara APPLICAMT: Padigaru, Muralidhara APPLICAMT: Padigaru, Muralidhara APPLICAMTON NO. US20040014038Alel GPCR-Like Proteins FUILE OF INVENTION NUMBER: 60/269, 552 PRIOR APPLICATION NUMBER: 60/269, 552 PRIOR APPLICATION NUMBER: 60/269, 552 PRIOR PLING DATE: 2001-01-03 PRIOR PLING DATE: 2001-01-03 PRIOR PLING DATE: 2001-01-03 PRIOR PLING DATE: 2001-01-03 PRIOR PLING DATE: 2001-01-03 PRIOR FILING DATE: 2001-01-03 PRIOR FILING DATE: 2001-01-03 PRIOR FILING DATE: 2001-01-03 LENGTH: 1104 TYPE: DNA ORGANISM: Homo sapiens FRATURE: 10-041-615-33	Length 1104;	Indels
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	DB	
045 [19	Score 1104;	Mismatches
1, 6.	a)	sma
10-041-615-33 10-041-615-33 equence 33, Application US/10041615 EMERAL INFORMATION: EMPLICANT: Camman, Stacie J APPLICANT: Edinger, Shlomit R APPLICANT: Edinger, Shlomit R APPLICANT: Edinger, Shlomit R APPLICANT: Edinger, Shlomit R APPLICANT: Edinger, Shlomit R APPLICANT: Fedinger, Shlomit R APPLICANT: Fedinger, Shlomit R APPLICANT: Fedinger, Shlomit R APPLICANT: Fedinger, Samesh APPLICANT: Fedinger, Shlomit R APPLICANT: Fedinger, Such 10-29 FILE REPERENCE: 21402-23-061 CURRENT FILING DATE: 2001-01-03 FRIOR FILING DATE: 2001-01-09 FRIOR FILING DATE: 2001-01-09 FRIOR FILING DATE: 2001-01-09 FRIOR FILING DATE: 2001-03-0 SOFTWARE: CUTSGGLIST VETSION 0.1 EQ ID NO 33 CHENGTH: 1104 TYPE: CUTSGGLIST VETSION 0.1 TYPE:	Score 1104;	, Mi
1004 1004 1004 1007 1007 1007 1007 1007	% . % .	,
Sequence 33, Application US/10041615 Sequence 33, Application US/10041615 Sequence 33, Application US/10041615 Publication No. US20040014038A1 GENERAL INFORMATION: APPLICANT: Casman, Stacie J APPLICANT: Bildner, Shlomit R APPLICANT: Bildner, Shlomit R APPLICANT: Smithson, Glennda APPLICANT: Smithson, Glennda APPLICANT: Smithson, Glennda APPLICANT: Smithson, US2004001403 TITLE OF INVENTION: No. US2004001403 FILE REPERENCE: 21402-233-061 CURRENT FILING DATE: 2003-01-29 PRIOR APPLICATION NUMBER: 60/259,552 PRIOR FLING DATE: 2001-01-09 PRIOR FLING DATE: 2001-01-09 PRIOR FLING DATE: 2001-01-09 PRIOR FLING DATE: 2001-03-20 NUMBER OF SEQ ID NOS: 174 SEQ ID NO 33 LENGTH: 1104 TYPE: DNA ORGANISM: Homo sapiens FRATURE: FRAT	100.0%;	Conservative
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1.33 1.00 US20040014 1.00 US20040014 1.00 US20040014 1.00 US20040014 1.00 US20040014 1.00 Edinger, Shore Edinger, Shore Edinger, Shore Edinger, Shore Edinger, Shore Edinger, Shore Enternant, Shore Enternant, Shore Enternant En	, ,	Cons
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0-041-615-33 quence 33, Aguence 33, Aguence 33, Aguence 33, Aguence 33, Aguence 31, Aguenc	tch	1104
10-041-615 educace 33 educace 33 educace 33 educace 33 educace 33 educace 33 educace 33 educace 33 educace 33 educace 33 educacion educa	Y Ma	hes
US-10-041-615-33 Sequence 33, Applica Sequence 33, Applica Publication Vo. US20 GENERAL INFORMATION: APPLICANT: Casman, APPLICANT: Edinger APPLICANT: Edinger APPLICANT: Edinger APPLICANT: Rekuda, APPLICANT: Rekuda, APPLICANT: Rekuda, APPLICANT: Rekuda, APPLICANT: Rekuda, APPLICANT: RELEGIBLE APPLICATION: FILE REPERENCE: 214 CURRENT APPLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR APPLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PLICATION N PRIOR PRIOR SEQ ID NO 33 LENGTHH: 1104 TYPE: DNA CRGANISM: HOMO SEQ FRATURE: DNA CRGANISM: HOMO SEQ NAME/KEY: CS NAME/KEY: CS NAME/KEY: CS	Query Match	Matches 1104;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        157 TGCCTTACCTGTCAAAAGAGCAGGAAGATCAACTGCACAGGCATCTACCTGGTGCACTG
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41.8%; Score 461; DB 14; Length 4319;
Best Local Similarity 99.8%; Pred. No. 2.3e-225;
Matches 581; Conservative 0; Mismatches 0; Indels 1
VESTIO-1017-161-1619

Sequence 1619, Application US/10017161

Sequence 1619, Application US/10017161

Sequence 1619, Application US/10017161

GENERAL INFORMATION:
APPLICANT: SUWA, MAKIKO
APPLICANT: ARTYAMA, YUTAKA
APPLICANT: ABURATANI, HIROYUKI
FILLE REFERENCE: 084335/0152
CURRENT APPLICATION NOWEL G PROTEIN-COUPLED RECEPTORS
FILLE REFERENCE: 084335/0152
CURRENT PILING DATE: 2002-12-18
CURRENT PILING DATE: 2002-12-18
FRIOR PILING DATE: 2001-06-18
NUMBER OF SEQ ID NOS: 2430
SOFTWARE PACENTIN VET. 2.1
SEQ ID NO 1619
LENGTH: 4319
                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA

ROGANISH: Homo sapiens
FEATURE:
LOCATION: (1)..(4319)
FEATURE:
NAME/KEY: CDS
LOCATION: (201)..(308)
FEATURE:
NAME/KEY: CDS
LOCATION: (3129)..(3531)
FEATURE:
NAME/KEY: CDS
LOCATION: (3660)..(4119)
FEATURE:
NAME/KEY: CDS
LOCATION: (110)
FEATURE:
NAME/KEY: CDS
LOCATION: (110)
FEATURE:
NAME/KEY: Modified base
LOCATION: (1)..(48)
COTHER INFORMATION: a, t, c, g, unknown or other
US-10-017-161-1619
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                                                                                               GTCTGTGCCCACTGGGGCCCGCGCCTCCGCACGGCTGGCCCAGGCTGGTCTGCGTG
                                                                                                                   457 GCCATCTGGACCTTGGTGCTGCTGCAGACGATGCCCTTGCTCTTGATGCCCATGACCAAG
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APPLICANT: Tank Find
APPLICANT: Tank Find
APPLICANT: Goodrich, Ryle
APPLICANT: Goodrich, Ryle
APPLICANT: Goodrich, Ryle
APPLICANT: Mang, Jian-Rui
APPLICANT: Wang, Dunrui
APPLICANT: Wang, Dunrui
APPLICANT: Wanzak, Vicki
APPLICANT: Wannac, Radole T.
TILLE OF INVENTION: Polypeptides
TITLE OF INVENTION: Polypeptides
FILE REPRENCE: 799
CURRENT FILING DATE: 2000-11-30
NUMBER OF SEQ ID NOS: 101
SOFTWARE: PL-FL-genes Version 2.0
SEQ ID NO 40
LENGTH 1526
THENCET HISSE
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Pred. No. 9.8e-199;
0; Mismatches 1;
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Patent No. US2002011302A1
GENERAL INPORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Zhou, Ping
APPLICANT: Coodrich, Ryle
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Mang, Jian-Rui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 99.7%;
Matches 579; Conservative (
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; ORGANISM: Homo sapiens
; FRATURE:
; NAME/KEY: CDS
; LOCATION: (684)..(1016)
US-09-728-952-40
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US-09-728-952-40
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Sequence 1293, Application US/10292798

Sequence 1293, Application US/10292798

GENERAL INFORMATION:

APPLICANT: SUMA, MAKIKO

APPLICANT: ASIN, KIYOSH,

APPLICANT: ABIRATANI, HIROYUKI

TILLE OF INVENTIONS GURANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS

FILE REFRENCE: 084335/166

CURRENT FILING DATE: 2002-11-13

PRIOR APPLICATION NUMBER: 10/107/161

PRIOR FILING DATE: 2001-06-18

NUMBER OF SEQ ID NOS: 2070

SEQ ID NOS: 2070

SEQ ID NO 1293

LENGTH: 4319
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                       2940 cecrcrcratraracacaccercergarerragaeceragaaaaaarerrageerr 2999
                                                                                          3419 CCCCTCATGGTCCTGGTGGCCTTTGCCATTGGCTTCTGTGGGCCAGTGGGGATCATCCTG 3478
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                                                                     636
   576
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   97 CGCTCTCTGTTCTACACACCCCTCCTGGTCTTCAGTGCCCTGGGAAACATCCTTGCCCTT
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41.8%; Score 461; DB 15; Length 4319;
Best Local Similarity 99.8%; Pred. No. 2.3e-225;
Matches 581; Conservative 0; Mismatches 0; Indels 1
                                                                                                                                                     3479 TCCTGCTATATGAAGATCACCTGGAAGCTGTGCAGACACAGCT 3520
                                                                                                                                     637 TCCTGCTATATGAAGATCACCTGGAAGCTGTGCAGCACAGCT 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: modified base
LOCATION: (1)..(48)
OTHER INFORMATION: a, t, c, g, unknown or other
US-10-292-798-1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: (1)..(4319)
FEATURE:
NAME/KEY: CDS
LOCATION: (201)..(308)
FEATURE:
NAME/KEY: CDS
LOCATION: (3128)..(3531)
FEATURE:
NAME/KEY: CDS
LOCATION: (3660)..(4119)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: source FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      157
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US-09-801-944B-64/C

US-09-801-944B-64/C

Sequence 64, Application US/09801944B

Publication No. US20040014169A1

GENERAL INFORMATION

APPLICANT: Wood, Linda S.

TITLE OF INVERMION: No. US20040014169A1el G Protein-Coupled Receptors

TITLE OF INVERMION: No. US20040014169A1el G Protein-Coupled Receptors

TITLE OF INVERMION: No. US20040014169A1el G Protein-Coupled Receptors

CURRENT APPLICATION NUMBER: 00/187,828

PRIOR FILING DATE: 2000-03-08

PRIOR FILING DATE: 2000-03-08

PRIOR FILING DATE: 2000-03-08

PRIOR FILING DATE: 2000-03-08

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NUMBER OF SEQ ID NOS: 273
SOFTWARE: Patentin version 3.0
SEQ ID NO 64
LENGTH: 556
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Pred. No. 1.8e-79;
0; Mismatches 1;
PRIOR APPLICATION NUMBER: 60/194, PRIOR FILING DATE: 2000-04-03
PRIOR PILING DATE: 2000-04-03
PRIOR PILING DATE: 60/210, PRIOR APPLICATION NUMBER: 60/210, SUMBER OF SEQ ID NOS: 184
SOFWARE: Patentin version 3.0
SEQ ID NO 35
LENGTH: 536
                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 99.6%;
Matches 226; Conservative
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CORGANISM: Homo sapiens
US-09-801-944B-64
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) ORGANISM: Homo sapiens
US-09-791-932-35
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: Ruff, Valerie
: Huff, Rita M.
' Wood, Linda S.
INVENTION: No. US20030003451Alel G Protein-Coupled Receptors Cross-Referen
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                                                   CTACACCG 337
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Parodi, Luis A.
Hiebsch, Ronald R.
Lind, Peter
Kaytes, Paul S.
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FILING DATE: 2000-0
APPLICATION NUMBER:
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1 Similarity 100.0%; Pred. No. 3e-05;
31; Conservative 0; Mismatches 0; Indels
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N BONE MARROW, SIGNAL = 3.1
N LUNG, SIGNAL = 2.8
N HEAN, SIGNAL = 2.8
N HEAR, SIGNAL = 3.3
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N HEARY, SIGNAL = 3.7
N HELIO, SIGNAL = 3.3
                                                                PRIOR FILING DATE: 2000-08-03
PRIOR FILING DATE: 2000-08-03
PRIOR FILING DATE: 2000-08-03
PRIOR PILING DATE: 2000-10-04
PRIOR PILING DATE: 2000-10-04
PRIOR PILING DATE: 2000-10-04
PRIOR PILING DATE: 2001-01-30
PRIOR PELICATION NUMBER: PCT/USO1/00667
PRIOR PILING DATE: 2001-01-30
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PRIOR APPLICATION NUMBER: PCT/USO1/00669
PRIOR PILING DATE: 2001-01-30
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Patent No. US20020048763A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
PEATURS:
OTHER INFORMATION: EXPRE
OTHER INFORMATION: EXPRE
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LOCATION: 124
NAME/KEY: unsure
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US-09-864-761-19928
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Matches 31
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Betent No. US20020048763A1

GENERAL INFORMATION:

APPLICANT: Rank, David R.

APPLICANT: Rank, David R.

APPLICANT: Rank, David R.

APPLICANT: Chen, Wensheng

TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USFFUL FOR FILE REPRENCE: Accompariation of GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REPRENCE: Accompariation NUMBER: US/09/864,761

CURRENT FILING DATE: 2001-05-23

FRIOR APPLICATION NUMBER: US 60/180,312

PRIOR PILING DATE: 2000-02-04

PRIOR APPLICATION NUMBER: US 60/207,456
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Batent No. US20020055179A1
GENERAL INFORMATION:
APPLICANT: Robison, Keith E
TITLE OF INVENTION: No. US20020055179A1e1 G-Protein Coupled Receptor Homologs
FILE REFRENCE: 8800-41 035800/183478
CURRENT APPLICATION NUMBER: US/09/812,102
PRIOR PILING DATE: 2001-03-19
PRIOR FILING DATE: 1999-07-30
NUMBER OF SEQ ID NOS: 90
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 90
LENGTH: 594
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      Score 159; DB 11; Length 556;
Pred. No. 9e-71;
0; Mismatches 1; Indels
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                                                                                                                                697 AGCAGGAAAGGACGCCACTGGCGAGGCTGCCTTACGCTGCTGATGCT
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Query Match
Best Local Similarity 99.5%;
Matches 209; Conservative
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ORGANISM: Homo sapiens
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US-09-812-102-90/c
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APPLICANT: KTEPS, JOICHAR
APPLICANT: KTEPS, JOICHAR
APPLICANT: PROPERT, Nicholas
APPLICANT: Ricke, Darrell
APPLICANT: Ricke, Darrell
APPLICANT: Ricke, Darrell
TITLE OF INVENTION: PROMOTERS FOR REGULATION OF PLANT EXPRESSION
FILE REFERENCE: 60111-NP
CURRENT APPLICATION NUMBER: US/10/260,238
CURRENT FILING DATE: 2002-09-26
PRIOR FILING DATE: 2001-09-26
PRIOR APPLICATION NUMBER: US 60/325,277
PRIOR APPLICATION NUMBER: US 60/325,277
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2002-04-04
NUMBER OF SEQ ID NOS: 6077
SEQ ID NO 1941
                                                                                                                                                                                                     GENERAL INCOME.

APPLICANT: Budworth, Paul R.
APPLICANT: Briggs, Steven P.
APPLICANT: Cooper, Steven P.
APPLICANT: Cooper, Steven P.
APPLICANT: Gazebrock, Jane
APPLICANT: Gazebrock, Jane
APPLICANT: Gargiti, Fumiyaki
APPLICANT: Katagiti, Fumiyaki
APPLICANT: Katagiti, Fumiyaki
APPLICANT: Katagiti, Nicholas
APPLICANT: Ricke, Darrell
APPLICANT: Ricke, Darrell
APPLICANT: Ricke, Darrell
APPLICANT: Ricke, Darrell
APPLICANT: Ricke, Darrell
APPLICANT: Shu, Tong
TITLE OF INVENTION: PROMOTERS FOR REGULATION OF PLANT EXPRESSION
FILE REFERENCE: 60111-NP
CURRENT APPLICATION NUMBER: US 60/325,448
PRIOR PILING DATE: 2001-09-26
PRIOR PELING DATE: 2001-09-26
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PRIOR APPLICATION NUMBER: US 60/310,620
PRIOR PELING DATE: 2001-09-26
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.00.0%; Pred. No. 2.9e-05;
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             327 ITCCTCCTCCTCCTCCTCCTCCTCCACC 357
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                                                                                                                                   Sequence 5532, Application US/10260238 Publication No. US20040016025A1
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Moughamer, Todd G.
Briggs, Steven P.
Cooper, Bret
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Goff, Stephen A.
Katagiri, Fumiyah
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; ORGANISM: Zea mays
US-10-260-238-5532
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NEXPRESSED IN BOND MARROW, SIGNAL = 3.1
NEXPRESSED IN LUNG, SIGNAL = 3.1
NEXPRESSED IN HELA, SIGNAL = 2.8
NEXPRESSED IN HELA, SIGNAL = 3.3
NEXPRESSED IN HELA, SIGNAL = 3.3
NEXPRESSED IN HELAT, SIGNAL = 3.7
NEXPRESSED IN PLACENTA, SIGNAL = 3.7
SEXPRESSED IN HELATO, SIGNAL = 3.7
SEXPRESSED IN HELLOO, SIGNAL = 3.7
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ADULT LIVER, SIGNAL
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US-10-029-386-17166
US-10-029-386-17166
Sequence 17166, Application US/10029386
Sequence 17166, Application US/20030194704A1
Sequence 17166, Application No. US20030194704A1
Sequence 17166, Application No. US20030194704A1
GENERAL INFORMATION:
APPLICANT: Rank, David R.
APPLICANT: Harzel, David R.
APPLICANT: Harzel, David R.
APPLICANT: Harzel, David R.
APPLICANT: Harzel, David R.
APPLICANTON: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
FILE REFERENCE: AEOMICA-X-2
CURRENT APPLICATION UNMERS: US/10/029,386
CURRENT APPLICATION UNMERS: 2001-12-20
NUMBER OF SEQ ID NOS: 34288
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 17166
ILENGENT 180
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OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 0.77
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.76
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.82
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.80
OTHER INFORMATION: EXPRESSED IN BORE MARROW, SIGNAL = 0.71
OTHER INFORMATION: ST HUMAN HIT: A1863650.1, EVALUE 6.30e+00
OTHER INFORMATION: NT HIT: AF059679.1, EVALUE 4.30e+00
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OTHER INFORMATION: MAP TO CHR22_184_2.0
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 3.2
                                                             PRIOR APPLICATION NUMBER: PCT/USO1/00664

PRIOR APPLICATION NUMBER: PCT/USO1/00669

PRIOR APPLICATION NUMBER: PCT/USO1/00669

PRIOR APPLICATION NUMBER: PCT/USO1/00665

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: PCT/USO1/00663

PRIOR APPLICATION NUMBER: PCT/USO1/00663

PRIOR APPLICATION NUMBER: PCT/USO1/00662

PRIOR APPLICATION NUMBER: PCT/USO1/00662

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PLICATION NUMBER: PCT/USO1/00670

PRIOR PLICATION NUMBER: PCT/USO1/00670

PRIOR PLICATION NUMBER: US 60/234,687

PRIOR PLICATION NUMBER: US 09/608,408

PRIOR PLICATION NUMBER: US 09/608,408

PRIOR PLICATION NUMBER: US 09/774,203

PRIOR PLICATION NUMBER: US 09/774,203

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PRIOR PLICATION NUMBER: US 09/774,203

PRIOR PLICATION NUMBER: US 09/774,203

PRIOR PLICATION NUMBER: US 09/774,203

PRIOR PRIICA DATE: 2001-01-29

NUMBER OF SEQ ID NOS: 49117

SEQ ID NO 27614
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Best Local Similarity 100.
Matches 30; Conservative
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ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP
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ORGANISM: Homo sapiens
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APPLICANT: Rank, David R.
APPLICANT: Rank, David R.
APPLICANT: Rank, David R.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David R.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Aconica-X-1
CURRENT APPLICATION NUMBER: US 60/180,312
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-06-03
PRIOR PILING DATE: 2000-06-03
PRIOR PILING DATE: 2000-09-03
PRIOR PILING DATE: 2000-09-03
PRIOR FILING DATE: 2000-09-27
PRIOR PILING DATE: 2000-09-27
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PRIOR FILING DATE: 2001-01-30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: YANASHITA, ICHIRO
TITLE OF INVENTION: High estragen-sensitive medaka fish
TITLE OF INVENTION: High estragen-sensitive medaka fish
FILE REPERENCE: 21021705-620-7249-0
CURRENT APPLICATION NUMBER: US/09/893,666A
CURRENT PILING DATE: 2002-02-12
PRIOR APPLICATION NUMBER: JP 2000-247729
PRIOR FILING DATE: 2000-08-17
NUMBER OF SEQ ID NOS: 7
SOFTWARE: Patentin version 3.1
SEQ ID NO: 1
LENGTH: 2764
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2.8%; Score 31; DB 15; L
Best Local Similarity 100.0%; Pred. No. 2.8e-05;
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Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/09893666A Patent No. US20020129386A1
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ORGANISM: Oryzias latipes
                                                                                                                                                                                                                                                                              975 ITCCTCCTCCTCCTC
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; LOCATION: (211)..(1935)
; OTHER INFORMATION:
US-09-893-666A-1
; LENGTH: 2000
; TYPE: DNA
; ORGANISM: Oryza sativa
US-10-260-238-1941
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US-09-864-761-27614
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US-09-893-666A-1/c
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EXPRESSED IN LUNG, SIGNAL = 2.8

EXPRESSED IN HELA, SIGNAL = 3.1

EXPRESSED IN HEART, SIGNAL = 2.5

EXPRESSED IN BONE MARROW, SIGNAL = 2.7

EXPRESSED IN FETAL LIVER, SIGNAL = 2.7

EXPRESSED IN FETAL LIVER, SIGNAL = 2.7

EXPRESSED IN FETAL LIVER, SIGNAL = 2.7

EXPRESSED IN FETAL LIVER, 9100e-01

EST_HUMAN HIT: AA703592.1, EVALUE 7.30e-01
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100.0%; Pred. No. 9.8e-05;
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  CTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 2.8 CTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.9 CTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 3.6 CTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 3.8 CTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 3.2 US-10-029-386-17166
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9.9e-05;
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2.7%; Score 30; DB:
Best Local Similarity 100.0%; Pred. No. 9.99
Matches 30; Conservative 0; Mismatches
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PRIOR PLING DATE: 2000-05-26
PRIOR PLING DATE: 2000-05-36
PRIOR PLING DATE: 2000-09-4
PRIOR PLING DATE: 2000-09-4
PRIOR PLING DATE: 2000-09-7
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PRIOR PLING DATE: 2000-09-30
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Patent No. US20020048763A1
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SOFTWARE: Annomax Sequence
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ljr43h08. BOHYQ12TF BONHE32TR

FGAS02155 RBM 34 Ge PGAAA12TF

BH542697 CD645470 CD645470 CD645470 CD645628 BH661526 BH661526 BH661526 BH673836 CD674211 BH73836 CD674153 BH738415 CC694153 BH7384156 CC694153 CC694154 CC6941

Tetraodon

RPCI-24-3 QCU17g11. RPCI-23-3 RPCI-23-3 3529 1 37

hp78f08.b SCCCFL409 SCSBAD108

Mus muscu OSJNEd16C

Tetraodon

OGSCH40TC PUFYW39TB

Tetraodon

Tetraodon FGAS01443 2M0065121

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Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 594)

NOI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Thuror Gene Index

Conteat: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov

This clone is available royalty-free through LLNL; contact the INAGS Conscritum (info@image.llnl.gov) for further information. Insert length: 10.14 Std Error: 0.00

Seq primer: -400P from Gibco

High quality sequence stop: 408.

1. 5594
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                                                                                                                                      CD942005
CG026240
BH061458
CF063130
AZ039092
AZ039077
CB334566
CG441247
CB079907
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AB055167
CB668345
CNS04PSZ
CG047970
CG253509
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Homo sapiens
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RESULT 1
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BY346000 BY346000
BH689531 BOMHB51TR
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                                                   February 21, 2004, 21:26:30 ; Search time 2795 Seconds (without alignments) 11795.294 Million cell updates/sec
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       GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                        27513289 seqs, 14931090276 residues
                                                                                                                                                                      Potal number of hits satisfying chosen parameters:
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BH689531
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                                     nucleic search, using sw model
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Title:

EST 18-DEC-1999

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Analysis of the mouse transcriptome based on functional annotation
                                                                290 CTTTCGGCAAGGGGCTCTGCAGGCTGACGGCGTTTGTGCTCTACACCGACACCTACGGGG 349
                                                                                                                                                                                                                                                                                                                         criricescaasesescriciscaescricacescerriciscriciacacescaacetaceses 471
                                                                                                                                              double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization. Library constructed by Bento Soares and M. Fatima Bonaldo. "
                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                          9.3%; Score 103; DB 9; Length 594;
100.0%; Pred. No. 2.3e-41;
iive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                    350 GGGTCTACCTCATGGCCTGTGAGCGTGGACCATTACCCAGC 392
                                         /dev_stage="fetal"
/lab_host="DH10B (phage-resistant)"
                           clone="IMAGE:2345880"
Ltype="mRNA"
xref="taxon:9606"
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Matches 103;
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Let: 0.1-3-2-0.2464

Fax: 81-45-603-9216

Email: genome-res@gsc.riken.go.jp,
Alzawa,K., Akimura,T., Arakawa,T., Carninci,P., Fukuda,S.,
Alzawa,K., Akimura,T., Arakawa,T., Toh,M., Kawai,J., Konno,H.,
Hirozane,T., Imotani,K., Ishii,Y., Itoh,M., Kawai,J., Konno,H.,
Miyazaki,A., Muraca,M., Nakaume,M., Nomura,K., Numazaki,R.,
Ohno,M., Sakai,K., Sakazume,M., Sasaki,D., Sato,K., Shibata,K.,
Shiraki,T., Tagami,M., Waki,K., Watahiki,A., Muramatsu,M. and
Hayashizaki,Y. Direct Submission
Computational Analysis of Full-Length Mouse cDNAs Compared
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
RIKEN integrated sequence analysis (RISA) system--384-format
sequencing pipeline with 384 multicapillary sequencer. Genome Res.
10 (11), 1757-1771 (2000)
Computer-based methods for the mouse full-length cDNA
encyclopedia: real-time sequence clustering for construction of a
nonredundant cDNA library. Genome Res. 11.(2), 281-289 (2001)
conputer-based methods for the mouse full-length cDNA
encyclopedia Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Exploration of Research Group in Riken
prepare mouse firenses
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bukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Brassica.
                                                                            Contact: Yoshihide Hayashizaki
Laboratory for Genome Exploration Research Group, RIKEN Genomic
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-Ku, Yokohama, Kanagawa 230-0045, Japan
Tel: 81-45-503-9222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prepare mouse tissues.

Tissues were provided by Vassilis Aidinis ( Biomedical Sciences Research Center 'Al. Fleming' Institute of Immunology 14-16 Al. Fleming street 16672 Vari, Greece ) whose assistance we gratefully
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acknowledge.
Please visit our web site (http://genome.gsc.riken.go.jp) for
further details.
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/clone_lib="RIKEN full-length enriched, whole joints"
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/db_xref="taxon:10090"
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| // organism="Rattus norvegicus" |
| // organism="Rattus norvegicus" |
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| // sizain="gyrague-Dawley" |
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| // orga="unbryonic 13 dpc" |
| // orga="unbryonic 13 dpc" |
| // orga="unbryonic 13 dpc" |
| // orga="unbryonic 13 dpc" |
| // orga="unbryonic 13 dpc" |
| // orga="unbryonic 13 dpc" |
| // orga="vector: pr7130-Pac (Pharmacia) with a modified polylinker; Site 1: Not 1; Site 2: Eco RI; The UI-R-BS0 |
| // orga="vector: pr7130-Pac (Pharmacia) with a modified polylinker; Site 1: Not 1; Site 2: Eco RI; The UI-R-BS0 |
| // orga="vector: pr7130-Pac (Pharmacia) with a modified detailed description of the library from which this clone was derived, please visit our web site at ratest.eng.uiowa.edu.
| TAG_INB-UI-R-BS0 |
| TAG_INB-UI-R-BS0 |
| TAG_INB-UI-R-BS0 |
| TAG_INB-UI-R-BS0 |
| TAG_SEQ=AATCC" |
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Warayota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots,
rosids, eurosids II, Brassicales, Brassicaceae, Brassica.
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/db rarain="TO100DH3"
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/clone lib="BOHL"
/note="Wector: pHOS1; Site 1: BBtXI; 2-3 kb sheared
genomic DNA inserted into pHOS1 using BstXI linkers"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 2).

Town, C.D., Van Aken, S., Utterback, T., Koo, H. and Fraser, C.M. Whole genome shocgun sequencing of Brassica oleracea Unpublished (2001)

Other GSSs: BOHLP40TF

Contact: Chris Town
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tel: 301-838-3523

Fax: 301-838-0208

Email: cdrowdigr.org

DNA is from a doubled haploid provided by Tom Osborn.

Seg primer: TR

Class: sheared ends.

Location/Qualifiers

1. 271

/organism="Brassica oleracea"
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100.0%; Pred. No. 8.5e-05;
ive 0; Mismatches 0; Indels
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Coordinated Laboratory for Computational Genomics
University of lowa
375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 9266
Fax: 319 335 9666
Email: bence-soares@uiowa.edu
The sequence contained an oligo-dT track that was present in the oligonuclectide that was used to prime the synthesis of first strand CDNA and therefore this may represent a bonafide poly A tail. The sequence tag present in the CDNA between the NotI site and the oligo-dT track served to verify it as a clone from the non-normalized embryo at 13 dpc library CDNA Library Preparation:
M.B. Soares Lab Clone distribution: clones will be available through Research Genetics (www.resgen.com) The following repetitive elements were found in this cDNA sequence: 4-123,
(GAA)n#Simple repeat 143-240, >1162_Send#LINE/Li
Seq primer: M13 Forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AWS12693 240 bp mRNA linear BST 06-MAR-2000 UL-R-BSO-amq-a-06-0-UI.81 UI-R-BSO Rattus norvegicus cDNA clone UI-R-BSO-amq-a-06-0-UI 3', mRNA sequence.
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
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Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Brassica oleracea"
/mol type="genomic DNA"
strain="T0100DH"
/db xxef="taxon:3712"
/clone="BOWHB51"
/clone="BOWHB51"
/clone="BOWHB51"
/note="Topecor: pHG51; Site 1: BstXI; 2-3 kb sheared
genomic DNA inserted into pHGS1 using BstXI linkers"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                       Town, C.D., Van Aken, S., Utterback, T., Koo, H. and Fraser, C.M. Whole genome shotgun sequencing of Brassica oleracea Unpublished (2001)
Other GSSs: BOMHSJIF
Contact: Chris Town
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
                                                                                                                                                                                                                                                             DNA is from a doubled haploid provided by Tom Osborn.
Seq primer: TR
Class: sheared ends.
Location/Qualifiers
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                                                                                                                                                                 9712 Medical Center Drive, Rockville, MD 20850, USA.
Tel: 301-838-3523
Fax: 301-838-0208
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2.9%; Score 32; DB 28; I
Best Local Similarity 100.0%; Pred. No. 8.3e-05;
Matches 32; Conservative 0; Mismatches 0;
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RESULT 6 CD845470

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BZ499662 570 bp DNA linear. GSS 16-DEC-2002 BONLU34TR BO 1.6_2 KB tot Brassica oleracea genomic clone BONLU34, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CD840534 FST 10-JUL-2003 RF02 Brassica napus CDNA clone RF02119L18, mRNA sequence.
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Mkaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots;
rosids, eurosids II; Brassicales, Brassicaceae; Brassica.
1 (bases 1 to 539)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Curreturne, a major partnership french program in plant genomics Unpublished (2003)
Contact: Genoplante
Genoplante
93, rue Henri Rochefort 91025 EVRY CEDEX France
Fax: 33 169 47 54 00
This sequence has been generated in the framework of the french plant genomics programme 'Genoplante' (http://www.genoplante.com and http://genoplante.info.infobiogen.fr).
Location/Qualifiers
This sequence has been generated in the framework of the french plant genomics programme 'Genoplante' (http://www.genoplante.com and http://genoplante-info.infobiogen.fr).
                                                                                                                                                                                                                                                                                                  Length 507;
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                                                                                    1. .539
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/db xref="taxon:3708"
/clone="RF02119118"
                                                                                                                                                                                                                                                                                                     2.9%; Score 32; DB 14; I 100.0%; Pred. No. 9.6e-05; ive 0; Mismatches 0;
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clone_lib="RF02"
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RFO2.115J02F010530 RFO2 Brassica napus CDNA clone RFO2115J02, mRNA
sequence.
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SEQUENCE.
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Mukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots,
rosids, eurosids II, Brassicales, Brassicaceae, Brassica.
1 (bases 1 to 506)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tue Henri Rochefort 91025 EVRY CEDEX France

73, rue Henri Rochefort 91025 EVRY CEDEX France

Fax: 33 1 69 47 54 10

Fis sequence has been generated in the framework of the french

plant genomics programme 'Genoplante' (http://www.genoplante.com

and http://genoplante-info.infobiogen.fr).
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Genoplante, a major partnership french program in plant genomics Unpublished (2003)

Contact: Genoplante
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Contact: Genoglante
Genoplante
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/db_xref="taxon:3708"
/clone="RF02143F14"
/tissue_type="anthers"
/clone_lib="RF02"
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Tel: 33 1 69 47 54 00
Fax: 33 1 69 47 54 10
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llarity 100.0%; Pred. No. 9.6e-05;
Conservative 0; Mismatches 0;
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Brassica napus
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VERSION KEYWORDS SOURCE ORGANISM

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RESULT 7 CD839500

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BONAF76TF BO_1.6_2_KB_tot Brassica oleracea genomic clone BONAF76, genomic survey sequence.
BZ430821.1 GI:26676292
Brassica oleracea
                                                                                                                                                                                                                                                                                                                                                                                                                BH661526 628 bp DNA linear GSS 19-FEB-2002 BOHVN92TF BO_2_3_KB Brassica oleracea genomic clone BOHVN92,
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Brassica oleracea
Brassica oleracea
Brassica oleracea
Brassica oleracea
Brassica oleracea
Brassica oleracea
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Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Brassica.

| (bases 1 to 628)
| Town,C.D., van Aken,S., Utterback,T., Koo,H. and Fraser,C.M.
Whole genome shotgun sequencing of Brassica oleracea
Unpublished (2001)
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genomic DNA inserted into pHOS1 using BstXI linkers"
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DNA is from a doubled haploid provided by Tom Osborn.
Seg primer: TF
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Best Local Similarity 100.0%; Pred. No. 9.9e-05;
Matches 32; Conservative 0; Mismatches 0;
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/organism="Brassica oleracea"
/mol type="Qenomic DNA"
/strain="TO1000DH3"
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BH661526
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: 301-838-3523
Fax: 301-838-0208
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                                                             Brassica oleracea
Brassica oleracea
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Spermatophyta, Varidiplantae, Streptophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Brassica.
Town, C.D., Van Aken, S., Utterback, T., Koo, H. and Fraser, C.M.
Whole genome shotgun sequencing of Brassica oleracea
Other GSSs: BONUU34TF
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Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,

Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots,

cosids, eurosida II, Brassicales, Brassicaceae, Brassica.

1 (bases 1 to 613)

Town, C.D., Van Aken, S., Utterback, T., Koo, H. and Fraser, C.M.

Whole genome shotgun sequencing of Brassica oleracea

Unpublished (2001)

Contact: Chris Town
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /dlone lib="BO 1.6 2 KB tot"
/note="Vector: pHOS1; Site 1: BstXI; 1.6-2 kb sheared
total DNA inserted into pHOS1 using BstXI linkers"
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9712 Medical Center Drive, Rockville, MD 20850, USA.
781: 301-838-0208
Fax: 301-838-0208
Email: cdtown@tigr.org
DNA is from a doubled haploid provided by Tom Osborn.
Seq primer: The Class: Sheared ends.
Location/Qualifiers
1. .570
/ cranism="Brassica oleracea"
/ mol_type="genomic DNA"
/ strain="TO1000DH3"
/ dlone="BONLU34"
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Email: 301-838-0208
Email: cdcown@tigr.org
DNA is from a doubled haploid provided by Tom Osborn. Seg primer: TF
Class: characted ends.
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100.0%; Pred. No. 9.7e-05;
ive 0; Mismatches 0; Indels
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/mol_type="genomic DNA"
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BZ499662.1 GI:27014967
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Brassica, Virighlantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Brassica.
1 (bases I to 701)
Belehaunty, K., Fewell, G., Fulton, L., McCombie, W.R., Miner, T.,
Nash, W., Rabinowicz, P.D. and Wilson, R.K.
Umpublished (2002)
Contact: Richard K. Wilson
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Brassica oleracea

Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnollophyta, eudicotyledons, core eudicots;
Spermatophyta, Brassicales, Brassicaceae, Brassica.

(Bases 1 to 646)

Town, C.D., Van Aken, S., Utterback, T., Koo, H. and Fraser, C.M.
Whole genome shocgun sequencing of Brassica oleracea
Wholbished (2001)
Other GSSS: BONAF76TR
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/mol_type="genomic DNA"
/mol_type="genomic DNA"
/db_xref="taxon:3712"
/clone lib="B.oleracea002"
/note="Vector: pOTW13; Whole genome shotgun library from
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Fax: 301-838-0208
Email: cdtown@tigr.org
MA is fram a doubled haploid provided by Tom Osborn.
Seg primer: TF
Class: sheared ends.
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9712 Medical Center Drive, Rockville, MD 20850, USA
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Washington University School of Medicine
Bail: submissions@watson.wustl.edu
Plate: odh46 row: a column: 04
Seq primer: -21UPpOT forward
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    /organism="Brassica oleracea"

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High quality sequence start: 65
High quality sequence stop: 474.
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Endastica oleracea

Endastorota; Viridiphantae; Streptophyta; Embryophyta; Tracheophyta;

Eukaryota; Viridiphantae; Streptophyta; Embryophyta; Tracheophyta;

Eukaryota; Viridiphantae; eddicotyledons; core eudicots;

rosids; eurosida II; Brassicales; Brassicacee; Brassica.

1 (bases 1 to 702)

S Delehanty,K., Fewell,G., Fulton,L., McCombie,W.R., Miner,T.,

Nabh,W., Rabinowicz,P.D. and Wilson,R.K.

Whole genome shotgun reads from Brassica oleracea

L unpublished (2002)

Contact: Richard K. Wilson

Genome Sequencing Center

Washington University School of Medicine

Email: submissions@watson.wustl.edu

Plate: odf67 row: h column: 07

Seq primer: -1UUPpOT forward
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/db_xref="taxon:3712"
/dclone lib="B.olearacea002"
/dote="Vector: poTw13; Whole genome shotgun library from flowering buds. DNA was purified from a crude nuclear prep using Brassica olearea TOHOODH3 buds provided by Prosmae Osborn at the University of Wisconsin. Genomic DNA was provided by Pablo Rabinowicz (CSHL) and the shotgun library prepared at Washington University Genome
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flowering buds. DNA was purified from a crude nuclear prep using Brassica oleracea TO1000DH3 buds provided by Thosmas Osborn at the University of Wisconsin. Genomic DNA was provided by Pablo Rabinowicz (CSHL) and the Sebtgan library prepared at Washington University Genome Sequencing Center."
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ive 0; Mismatches 0; Indels
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High quality sequence stop: 551.
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/organism="Brassica oleracea"
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Genoplante, a major partnership french program in plant genomics Unpublished (2003)
Contact: Genoplante
Contact: Genoplante
Genoplante
Genoplante
93, rue Henri Rochefort 91025 EVRY CEDEX France
Tel: 33 1 69 47 54 10
This sequence has been generated in the framework of the french plant genomics programme 'Genoplante' (http://www.genoplante.com plant genomics programme 'Genoplante' (http://www.genoplante.com plant genomics programme 'Genoplante' (http://www.genoplante.com incationalifiers
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// Organismi=Triticum aestivum"
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// Mol type="mana" / forganismi=Triticum aestivum"
// Mol type="textital"
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Triticum aestivum
Sukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae,
Pooldeae, Triticeae, Triticum.
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cardiomyopathy; atherosclerosis; diabetes; cancer; stroke; Von Hippel-Lindau sydrome, Alzheimer's disease; tuberous sclerosis; Von Hippel-Lindau sydrome, Alzheimer's disease; tuberous sclerosis; phypercalcaemia; Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome; multiple sclerosis; ataxia-telanglectasia; leukodystrophy; addiction; anxiety; depression; paln; Obesity; Crohn's disease; nicertility; hypertension; scleroderma; inflammatory bowel disease; infertility; hypertension; scleroderma; arthritis; human immunodeficiency virus; autoimmune disease; HIV;
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Maximum Match 100%
Listing first 45 summaries
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Perfect :
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	Description	Human GPCR16 prote	Novel human diagno	Epstein Barr virus	Epstein Barr virus	Human G protein-co	Human EBV-induced	Human mutant G pro	Human novel polype	Human G Protein-Co
SOMMAKIES	QI		ABG14682	AAR54080	AAW53623	AAY90630	ABP81814	AAY90664	ABG66698	AAU25588
	DB	23	22	15	19	21	24	21	23	22
	% Query Match Length DB :	360	377	361	361	361	361	361	110	177
	* Query Match	100.0	80.3	33.7	33.7	33.7	33.7	33.6	29.6	22.2
	Score	1876	1506	632.5	632.5	632.5	632.5	630.5	555	417
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03-JAN-2001; 2001US-259552P. 09-JAN-2001; 2001US-260544P. 20-MAR-2001; 2001US-277405P. 03-JAN-2002; 2002WO-US00056

WO200264793-A2. Homo sapiens.

22-AUG-2002

uman mutant G pr	transmembr	G-protein	R12 seven	Human 7TM receptor		ריז	steinyl	Human 7 transmembr	Human G-protein co	Human G protein-co	Human G protein-co	Human PAR1 type th	Human PAR1 type th	Human PAR1 type th	Fragment of the hu	rombin r		Human thrombin rec	Human thrombin pro	thrombin p	t cancer a	thrombin		Human thrombin rec	uman thro		P2Y purino	placenta G	P2-purinerg	nergio	Non-endogenous hum	Human placenta pur	-proteir	Human G-protein ch	Human CC chemokine	Ş.
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Kekuda R;

Ellerman K, Smithson G,

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This invention relates to a new isolated G-protein coupled receptor

(GPCRX) polypeptide, GPCRX mucleic acid and an antibody specific to the protein

are useful GPCRX mucleic acid and an antibody specific to the protein

are useful for treating, preventing or alleviating a GPCRX-associated

disorder or a pathological state in a subject, particularly a human. In

particular, the disorder is cardiomyopathy, atheroscierosis, diabetes,

or a disorder related to cell signal processing and metabolic pathway

modulation. The GPCRX polypeptide and nucleic acid are also useful for

diagnosing the presence of or predisposition to a disease associated

with altered levels of GPCRX, particularly cancer. The GPCRX nucleic

acid and polypeptide are especially useful in the manufacture of a

medicament for therapeutic or prophylactic applications for disorders

associated with aberrain GPCRX syression or activity, e.g. von

Hippel-Lindau syndrome, Alabeimer's disease, stroke, tuberous

celerosis, hypercalcaemia, Parkinson's disease, Huntington's disease,

cerebral palsy, epilepsy, Lesch-Hybna syndrome, multiple solerosis,

disease, infertility, hypertension, solecoporosis, inflammatory bowel

cerebral palsy, epilepsy, cerebroning disease,

disease, infertility, hypertension, solecoporosis, inflammatory bowel

disease, infertility, hypertension, solecoporosis, infertions, or graft-versus

constitute, tengal, bacterial or protocoal infections, or graft-versus

constitute, the above conditions. The polypeptides can be used as

indeveloping powerful assay system for functional analysis of various

the invention preventive and pharmacogenomics. The nucleic acids are

trying, preventive medicine, and pharmacogene can be used as

in developing powerful assay system for functional analysis of various

contents and proper and pharmacogenes. The played protein

content and proper and protein coupled receptor related protein

contents as well as a well as a sellan coupled receptor related protein
                                                                                                                                                                                                                               New isolated G protein coupled receptor polypeptides and polynuclectides, useful in gene therapy, particularly for treating or preventing cardiomyopathy, atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer.
                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 98; 252pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GPCR) of the invention.
                                                                             Edinger SR,
                         (CURA-) CURAGEN CORP.
                                                                                                                                                        WPI; 2002-643487/69.
                                                                                                                                                                                       N-PSDB; ABS64723
                                                                                                       Muralidhara P;
                                                                             Casman SJ,
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Conservative Best Local Similarity Matches 360; Conserv 360 AA; Sequence 61 Query Match

240 61 KINCTGIYLVHLAVSDLLFTVALPGRVVCYVIGSSWPFGKGLCRLTAFVLYTDIYGGVYL 120 180 KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYL 120 MACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPWTKPLVGKLAC 180 9 1 MIKLGPYFTPPTKIKTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR 181 MEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR GCLLTLLMLVAVVVCFSPYHLNIKQFMARGMLHLPSCAERRAFLLSLQATVALMNMNCGI 1 MIKLGPYFTPPTKIKTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR Gaps ° 100.0%; Score 1876; DB 23; Length 360; 100.0%; Pred. No. 2.1e-191; tive 0; Mismatches 0; Indels 0; 121 121 181 241 d ઠે 쉽 ò 셤 ò DD ò

The invention relates to isolated polynucleotide (I) and probes, polymeriae (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome polymerase chain reaction (PCR) primers, oligomers, and for chromosome company and in recombinant production of (II). The polymucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genee. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical inaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or cher traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences of the invention.

Combo to produce other types of data and products dependent on DNA and amino acid sequence of the invention.

Combo technologies of this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at the viny point/pub/published_pot_sequences. 301 TPIIYFFASTHYRKWLLGILKLKGSSSSSSSSSSTPGKASSETPSITQARGSMFLAEHVV New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess Human, chromosome mapping, gene mapping, gene therapy, forensic, food supplement, medical imaging; diagnostic, genetic disorder. Claim 20; SEQ ID No 45041; 103pp; English. Novel human diagnostic protein #14673. Ā ABG14682 standard; Protein; 377 Tang YT; 30-MAR-2001; 2001WO-US08631. 31-MAR-2000; 2000US-0540217. 23-AUG-2000; 2000US-0649167. (first entry) WPI; 2001-639362/73. rin c, (HYSE-) HYSEQ INC N-PSDB; AAS78869. WO200175067-A2. Homo sapiens. biodiversity 18-FEB-2002 Drmanac RT, 11-OCT-2001. ABG14682; ABG14682 RESULT

94 LEYTALLVESALGNILALCLTCQKSEKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGS 35

ij

Gaps

:99

80.3%; Score 1506; DB 22; Length 377; 80.6%; Pred. No. 6.8e-152; ive 1; Mismatches 4; Indels 66;

Matches 295; Conservative Query Match Best Local Similarity

8

GCLITILMLVAVVVCFSPYHLNIKQFMARGMLHLPSCAERRAFILSLQATVALMMNVGI 300

377 AA;

Sequence

92US-0980518

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(BGHM ) BRIGHAM & WOMENS HOSPITAL.
                               Birkenbach M, Kieff
                                               WPI; 1994-200183/24.
N-PSDB; AAQ64126.
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25-NOV-1992;
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                154
69
                                                         310 RGMLHLPSCAERRAFLLSLQATVALMNWNCGIDPIIYFFASTHYRKWLLGILKLKGSSSS
LFYTALLVFSALGNILALCLTCQKRRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGS
                SWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAI
                           WILVILQIMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSC
                                                                                                               ---TAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFMA
                                                                                                                                                                                                                                                                                                                                                                                                                                               ..../v]-D-R-[Y/F]-X-X-X-X) is highly conserved among a large number of G-protein coupled receptors."
                                                                                                                                                                                                                                                                                                                                                                                'note= "Potential N-linked glycosylation site."
                                                                                                                                                                                                                                                                                                               Epstein Barr virus; EBV; induction; detection; diagnosis; lymphocytes; antigen; growth; differentiation; mediator; infectious mononucleosis.
                                                                                                                                                                                                                                                                                               Epstein Barr virus induced (EBI-2) polypeptide
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label= Hydrophobic region.
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/label= Hydrophobic region.
126..134
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(first entry)
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Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 KINSTILYSTNLVISDILFTTALPTRIAYYAMGFDWRIGDALCRITALVFYINTYAGVNF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 MEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 IKLGPYFTPPTKI-KTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                 BBV infected B lymphocytes recapitulate features of antigen stimulation in enlarging, increasing RNA synthesis, expressing activation antigens and adhesion molecules, secreting Ig and proliferating. Unlike antigens timulated B lymphocytes, BBV infected B lymphocytes continue to proliferate (in vitro) as immortalised lymphoblastoid cell lines. Because of the similar effects of EBV and antigen, EBV induced genes are likely to include mediators of antigen induced B lymphocyte growth or differentiation. (Updated on 25-WAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Assessing, monitoring; foetal development; placental development;
Epstein Barr virus; EBV; induced gene 2; EBI-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 15; Length 361;
DNA coding for Epstein Barr Virus induced (EBI) polypeptide(s) and antibodies to EBI1, 2 and 3 - useful for detecting EBV by hybridisation or by immunoassay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 33.7%; Score 632.5; DB 15; Length Best Local Similarity 37.8%; Pred. No. 1.1e-58; Matches 135; Conservative 74; Mismatches 141; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Epstein Barr virus induced gene 2 (EBI-2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW53623 standard; Protein; 361 AA.
                                                                                                                    8; Page 58-60; 84pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               361 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           X B X S X & X B X B X B X S X B
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Homo sapiens.

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Assessing or monitoring foetal or placental development - comprises detecting the level or size of Epstein Barr virus induced nucleic acid or protein in maternal serum samples
                                                                                                                                                                                                                            The present sequence was used in the development of a novel method for assessing or monitoring foetal or placental development. The method comprises taking a maternal serum sample, and detecting the level or sizé of Epstein Barr virus (EBV) induced gene or protein 3 (EBI-3) to obtain a result, which can be compared to a control to assess or monitor foetal or placental development.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G protein-coupled receptor; GPCR; constitutively active;
intracellular loop 3; transmembrane domain 6; drug screening;
                                                                                                                                                                                                           Columns 43-46; 45pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human G protein-coupled receptor EBI2
                                                                                    (BGHM ) BRIGHAM & WOMENS HOSPITAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY90630 standard; Protein; 361
                                        95US-0383750.
92US-0980518.
94US-0352678.
                     95US-0383750
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                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                         Birkenbach M, Kieff
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agonist; antagonist
                                                                                                                                                                                                                                                                                                                                         Local Similarity
es 135; Conserva
                                                                                                                                WPI; 1998-271060/24.
N-PSDB; AAV25491.
                                                                                                                                                                                                                                                                                                            361 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-AUG-2000
                     02-FEB-1995;
                                                     25-NOV-1992;
28-APR-1998
                                           02-FEB-1995
                                                                                                                                                                                                           Example 2;
                                                                                                                                                                                                                                                                                                              Sequence
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                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                         Matches
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The invention relates to constitutively active, non-endogenous versions of endogenous human orphan G protein-coupled receptors (GPCRS, AAY90643-AAY90677 and AAAY90677 and AAAY90677 and AAAY90643-AAY909-AA30743 and AAAY9079). The mutant proteins of the invention contain a mutation in a portion of the protein comprising intracellular loop 3 (TC3) and transmembrane domain 6 (TM6). A non-endogenous amino acid, X, is substituted for an endogenous residue in IC3 at a position 16 amino acids N-terminal of an endogenous proline in TM6 to form a sequence of AAA) 15-pro. The endogenous mino acid is selected from Lys, His, Argor TA1, and is preferably Lys. When the endogenous residue at this position is Lys, this residue is replaced by His, Argor preferably Alactor and is preferably Lys. When the substituted amino acid and the Promap be endogenous, non-endogenous, or a mixture of endogenous and the Promonendogenous residues. The constitutively active GPCRS are useful for identifying antagonists, agonists and partial agonists for use as pharmaceutical agents. The mutant proteins are also useful in research settings for elucidating the roles of the receptors in normal and settings for elucidating the roles of the receptors in normal and settings for elucidating the roles of the receptors in normal and diseases and disorders associated with that receptor. Because the novel mutant GPCRs are constitutively active, they can be used direatly for screening of compounds without the need for endogenous and income represents a human wild-type GPCR referred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 GCLLTLIMLVAVVVCFSPYHLNIKQFMARGM--LHLPSCAERRAFILSLQATVALMNMNC 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ands. The present sequence represents a human wild-type GPCR referred in an exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPPGKGLCRLTAFVLYTDTYGGVYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 IQMANNFTPPSATPQGNDCDLYAHHSTARIVM-PLHYSLVFIIGLVGNLLALVVIVQNRK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 MACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEYSSMESVLGL PLMVLVAPAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR
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                                                                                                                                                                                                                                                                                                                                        Non-endogenous constitutively activated human G protein-coupled receptors, useful for identifying agonists for use as pharmaceutical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33.7%; Score 632.5; DB 21; 37.8%; Pred. No. 1.1e-58; ive 74; Mismatches 141;
                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 160-162; 341pp; English.
                                                                                                                                                                                                                                        Liaw CW;
                                                                                                                     99WO-US23938
                                                                                                                                                            98US-0170496
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Best Local Similarity 37.8
Matches 135; Conservative
                                                                                                                                                                                                                                           Chalmers DT,
                                                                                                                                                                                                   (AREN-) ARENA PHARM INC
                                                                                                                                                                                                                                                                                  2000-329165/28
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                                       40200022129-A1
                                                                                                                     12-OCT-1999;
                                                                                                                                                            3-0CT-1998;
                                                                                20-APR-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPPGKGLCRLTAFVLYTDTYGGVYL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLLMPMTKPLVGKLAC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALNITILIIVVEVI.CFTPYHVAIIQHMIKKI.RFSNFLECSQRHSPQISLHFTVCLMNFNC 301
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 IKLGPYFTPPTKI-KTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 361;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33.7%; Score 632.5; DB 19; Length
37.8%; Pred. No. 1.1e-58;
tive 74; Mismatches 141; Indels
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Length 361; Indels 120

61

240

242 ALNTIILLIVVFVLCFTPYHVALIQHMIKKLRFSNFLECSQRHSFQISLHFTVCLMNFNC 301

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DB 24; Length 361;

361 AA;

cancer or autoimmune diseases 19-DEC-2001; 2001WO-US50107. 19-DEC-2000; 2000US-257144P. 04-MAR-2003 (first entry) Burmer GC, Roush CL, WPI; 2003-046718/04. N-PSDB; ABZ42660. WO200261087-A2. Homo sapiens. 08-AUG-2002 ABP81814; 302 ulcer. RESULT A PROPERTY OF COLORS OF THE PROPERTY OF ò ВÞ

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used in immunoassays and immunodiagnosis. ABZ42523 to ABZ42869 encode GPCR proteins given in ABP81675 to ABP82018, which are used in the exemplification of the present invention.
                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                   Sequence
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(a) any one of 1601 sequences (see ABP82019 to ABP83619) of 12-24 amino caids. Also described: (I) an assay for the detection of a particular of protein-coupled receptor (GPCR) or a candidate polypeptide in a sample; and (2) an isolated antibody having high specificity and high affinity or avidity for a particular GPCR. (I) can be used as GPCR modulators and in gene therapy. The antigenic peptides for GPCRs are useful in detecting an antibody against a particular GPCR, and in the production of specific an inbodies. The peptides and antibodies are also useful for detecting the presence or absence of corresponding GPCRs. The antigenic peptides for GPCRs and antibodies are useful for diagnosing and designing drugs for treating immune-related diseases, growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, or autoimmune diseases, e.g. AlDS, Alaheimer's disease, atherosclerosis, bacterial, fungal, protozoan or viral infections, atherosclerosis, bacterial, fungal, protozoan or viral infections, consecutation, allergies, Crohn's disease, diabetes, graft versus host disease, Parkinson's disease, multiple sclerosis, pain, psoriasis, considers, depreseation, schizophrenia, dementia, mental retardation, memory consecutation, renal disorders, rheumatoid arthritis, trauma, ulcers, or any other disorder in which GPCRs are involved. The antibodies may be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G protein-coupled receptor; GPCR; antigenic peptide; gene therapy; G protein-coupled receptor modulator; antibody; immune-related disease; growth-related disease; cell regeneration-related disease; Anner; immunological-related cell proliferative disease; autoimmune disease; Alzheimer's disease; atherosclerosis; infection; osteoarthritis; allergy; osteoporosis; cardiomyopathy; inflammation; Crohn's disease; diabetes; graft versus host disease; Parkinson's disease; multiple sclerosis; pain; psoriasis; anxiety; depression; schizophrenia; dementia; memory loss; mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea; hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated antigenic peptides e.g., for G protein-coupled receptors (GPCR), useful for diagnosing and designing drugs for treating conditions in which GPCRs are involved, e.g. AIDS, Alzheimer's disease,
                GITPIIYFFASTHYRKWLLGILKLKGSSSSSSSSSSTPGKAS---SETPSITQARGS 352
                                                         CMDPFIYFFACKGYKRKVWRMLKRQVSVSISSAVKSAPEENSREMTETQMMIHSKSS 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human EBV-induced gene 2 protein SEQ ID NO:112.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure, Fig 1, 523pp; English.
                                                                                                                                                                                                                                                                                          ABP81814 standard; Protein; 361 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brown JP;
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MACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLLMPMTKPLVGKLAC 180
                                                                                                                                                                                                                                181 MEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR 240
                                                                                                               61 KINCTGIYLVHLAVSDLIFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYIDTYGGVYL 120
                                                                                                                                                                                                                                                             241
                                                                                                                              62 KINSTILYSTNLVISDILFTTALPTRIAYYAMGFDWRIGDALCRITALVFYINTYAGVNF 121
                                                                                                                                                                                        242 ALWIILLIIVVFVLCPTPYHVALIQHMIKKCLRFSNFLECSQRHSFQISLHFTVCLMMFNC 301
                                                                                  61.
                                                                                                                                                                                                                                                                                                                                                                  302 CMDPPIYFFACKGYKTKVWRMLKRQVSVSISSAVKSAPBENSREMTETQMMIHSKSS 358
                                                                                                                                                                                                                                                                                                                                                   GITPIIYFFASTHYRKWLLGILKLKGSSSSSSSSSSTPGKAS---SETPSITQARGS 352
                                                                                                                                                                                                                                                 241 GCLLTLIMLVAVVVCFSPYHLNIKQFMARGM--LHLPSCAERRAFLLSLQATVALMNMNC
                                                       2 IKLGPYFTPPTKI-KTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Non-endogenous constitutively activated human G protein-coupled receptors, useful for identifying agonists for use as pharmaceutical agents
                             7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G protein-coupled receptor; GPCR; constitutively active; intracellular loop 3; transmembrane domain 6; drug screening; agonist; antagonist; mutant; mutein.
33.7%; Score 632.5; DB 24; Length
37.8%; Pred. No. 1.1e-58;
ive 74; Mismatches 141; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human mutant G protein-coupled receptor EBI2 (1243K).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY90664 standard; Protein; 361 AA,
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                                Matches 135; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (AREN-) ARENA PHARM INC.
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N-PSDB; AAA30730.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
Synthetic.
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fungal infection.

40200244340-A2. Homo sapiens.

06-JUN-2002

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The invention relates to constitutively active, non-endogenous versions of endogenous human orphan G protein-coupled receptors (GPCRs, AAY90643-C AAY90677 and AAA30677, and to DNA encoding them (AAA30709-A330743 and AAA30779-A30779). The mutant proteins of the invention contain a mutation in a portion of the protein comprising intracellular loop 3 (IC3) and transmembrane domain 6 (TM6). A non-endogenous amino acids, X, is substituted for an endogenous residue in IC3 at a position 16 amino acids N-terminal of an endogenous proline in TM6 to form a sequence or Ala, and is preferably Lys. When the endogenous residue at this position is Lys, this residue is replaced by His, Arg or preferably Ala. The amino acid stretch between the substituted amino acid and the Promay be endogenous, non-endogenous, or a mixture of endogenous and non-endogenous residues. The constitutively active GPCRs are useful for identifying antagonists, agonists and partial agonists for use as pharmaceutical agents. The mutant proteins are also useful for creaning for elucidating the roles of the receptors in normal and diseased conditions. Antagonists for a particular GPCR are useful for treating siesses and disorders associated with that receptor. Because the novel mutant GPCRs are constitutively active, they can be used directly for screening of compounds without the need for endogenous constitutively active, they can be used the number of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention.
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30-NOV-2001; 2001WO-US47004. 10-NOV-2000; 2000US-0028952.

(HYSE-) HYSEQ INC.

361 AA; Sequence

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181 MEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR 240
                                                                                                                                                                                                                                                                                                                                                                                                        241 GCLETLIMIVAVVVCFSPYHLNIKOFMARGM--LHLPSCAERRAFILISLOATVALMNMNC 298
                                                                                                                                                            61 KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYL 120
                                                                                                                                                                                    62 XINSTILYSTNLVISDILFTTALPTRIAYYAMGFDWRIGDALCRITALVFYINTYAGVNF 121
                                                                                                                                                                                                                                           MACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLAC 180
                                                                                                                                                                                                                                                                           242 AKNTIILIIVVFVLCFTPYHVALIQHMIKKLRFSNFLECSQRHSFQISLHFTVCLMMFNC 301
                                                                                                                   3 IQMANNFIPPSATPQGNDCDLYAHHSTARIVM-PLHYSLVFIIGLVGNLLALVVIVQNRK 61
                                                                               2 IKLGPYFTPPTKI-KTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     299 GITPLIYFFASTHYRKWLLGILKLKGSSSSSSSSSSTPGKAS---SETPSITQARGS 352
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                                             Gaps
                                        7;
    DB 21; Length 361;
33.6%; Score 630.5; DB 21; Length
37.8%; Pred. No. 1.8e-58;
tive 74; Mismatches 141; Indels
                           Local Similarity 37.8
nes 135; Conservative
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        Query Match
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Human; inflammatory condition; shock; sepsis; immune response; cancer; wound healing; central nervous system disease; haematopoiesis; peripheral nervous system disease; amyotrophic lateral sclerosis; tendon; myeloid cell disorder; lymphoid cell disorder; platelet disorder; bone; cartilage; ligament; nerve tissue; ulcer; osteoporosis; osteoarthritis; bone degenerative disorder; periodontal disease; reperfusion injury; lung fibrosis; liver fibrosis; autoimmune disorder; bacterial infection; allergic condition; thrombolysis; thrombosis; coagulation disorder;
                  ABG66698 standard; Protein; 110 AA.
                                                                                                                                                    Human novel polypeptide #33.
                                                                                                       (first entry)
                                                                                                          30-AUG-2002
                                                             ABG66698;
ABG66698
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AAU25588 standard; Protein; 177 AA

18-DEC-2001

AAU25588;

AAU25588 ID AAU2 XX AC AAU2 XX DT 18-D

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contraction relates to numen novee polymucterolluses and associated to polymptides are useful for treating inflammatory conditions such as arthritis, nephritis, Crohm's treating inflammatory conditions such as arthritis, nephritis, Crohm's disease, ischaemia-reperfusion injury, shock, sepsis, immune responses and cancer and for promoting wound healing. The sequences are used to induce the proliferation of neural cells and regeneration of nerve and induce the proliferation of neural and peripheral nervous system diseases and neuropathies, such as Alzheimer's disease, nervous system diseases and neuropathies, such as Alzheimer's disease, controlly a sequences are involved in chemicactic or chemokinetic activity, regulation of hematopoises, treatment of myeloid or lymphoid cell disorders and platelet disorders such as thrombocytopenia, call disorders and platelet disorders such as thrombocytopenia, collease. The sequences of the invention, ligament and/or merve tissue growth, tissue repair, healing of burns, incisions, ulcers, treatment of growth, tissue regeneration and treatment of lung or liver fibrosis, ortocection or regeneration and treatment of lung or liver fibrosis, repertusion injury in various tissues, immune deficiencies and disorders including severe combined immunodeficiency (SCID), bacterial or fungal infections, autoimmune disorders e.g. multiple sclerosis and myasthenia or gravis, allergic conditions such as asthma, thrombolysis or thrombosis or and coagulation of invarions.
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Pred. No. 4.3e-51;
0; Mismatches 1; Indels (
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                                                                                                                                                                                                                                                                                     Wang
                                                                                                                                                                                                                                                                                                                                                                                                                Novel nucleic acids and polypeptides for diagnosis,
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                                                                                                                                                                                                                                                                                                                                                                                                                                    inflammatory, autoimmune, nervous system, myeloid disorders, cancer and promoting wound healing
                                                                                                                                                                                                                                                                                       Liu C, Zhou P,
Drmanac RT;
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Best Local Similarity 99.1%;
Matches 105; Conservative
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Yamazaki V, Ujwal ML,
                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-508509/54.
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Human; G-protein coupled receptor; GPCR; mental disorder; schizophrenia; attention deficit disorder; anxiety; depression; bipolar disorder; neurological disorder; Huntington's disease; dementia; obesity; anorexia; metabolic disorder; Parkinson's disease; Tourette's syndrome; thrombosis, type 2 diabetes; cardiovascular disorder; myocardial infarction; cancer; cardiomyopathy; atheroscalerosis; human immunodeficiency virus; HIV; viral infection; immunostimulant; neuroleptic; nootropic; tranquiliser; antidepressant; anorectic; gene therapy.

Protein-Coupled Receptor (GPCR) polypeptide #35

Ö Human Homo sapiens.

WO200162797-A2.

30-AUG-2001

23-FEB-2001; 2001WO-US05676

23-FEB-2000; 2000US-0184247.
23-FEB-2000; 2000US-0184303.
23-FEB-2000; 2000US-0184304.
23-FEB-2000; 2000US-0184305.
23-FEB-2000; 2000US-0184305.
03-MAR-2000; 2000US-0188657.
09-MAR-2000; 2000US-0188064.
13-MAR-2000; 2000US-0188064.
13-MAR-2000; 2000US-0188064.
13-MAR-2000; 2000US-0188064.
13-MAR-2000; 2000US-013861.
11-JUL-2000; 2000US-0213861.
11-JUL-2000; 2000US-0213861.
11-JUL-2000; 2000US-0213861.
11-JUL-2000; 2000US-0213861.
11-JUL-2000; 2000US-0213861.

(PHAA) PHARMACIA & UPJOHN CO

Lind Parodi LA, Vogeli G, Wood LS,

WPI; 2001-570628/64. N-PSDB; AAS42840.

New isolated nucleic acid encoding a new G-protein coupled receptor polypeptide for detecting receptor modulators that can treat mental disorders, such as schizophrenia, anxiety, depression, or obesity -

Claim 35; Page 83; 279pp; English.

Sequences AAU25554-AAU25616 represent human G-protein coupled receptor (GPCR) polypeptides of the invention. The proteins and their associated DNA sequences can be used to identify compounds which bind to GPCR polypeptides and in screening for compounds that modulate GPCR activity. By screening a human subject for the presence of mutations in GPCR activity. GPCR-related disorder or a genetic predisposition can be diagnosed. The asquences can also be used for treatment and prevention of mental disorders such as schizophrenia, attention deficit disorder, anxiety, depression, dementia and bipolar disorder, neurological disorders such as thuntington's disease, parkinson's disease and Tourette's syndrome, metabolic disorders such as obesity, anorexia and type 2 diabetes, cardiomyspathy and atherosclerosis, viral infections caused by HIV and

177 AA; Sequence

Gaps 40; 22.2%; Score 417; DB 22; Length 177; 58.9%; Pred. No. 4.3e-36; cive 8; Mismatches 17; Indels 4(Query Match 22.2 Best Local Similarity 58.9 Matches 93; Conservative

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AAY90652 standard; Protein; 339 AA

AAY90652;

(first entry) 21-AUG-2000 Human mutant G protein-coupled receptor GPR17 (V234K).

G protein-coupled receptor; GPCR; constitutively active; intracellular loop 3; transmembrane domain 6; drug screening; agonist; antagonist; mutant; mutein.

Homo sapiens Synthetic.

WO200022129-A1.

20-APR-2000.

99WO-US23938. 12-OCT-1999;

98US-0170496. 13-OCT-1998;

(AREN-) ARENA PHARM INC.

Sehan DP, Chalmers DT, Liaw CW

WPI; 2000-329165/28. N-PSDB; AAA30718.

Non-endogenous constitutively activated numan G protein-coupled receptors, useful for identifying agonists for use as pharmaceutical agents

Example 2; Page 233-234; 341pp; English.

The invention relates to constitutively active, non-endogenous versions of endogenous human orphan G protein-coupled receptors (GPCRs, AAY90643-CAAY0677 and AAY90677 and AAY90677 and AAY90677 and AAY30779-A30779). The mutant proteins of the invention contain a mutation in a portion of the protein comprising intracellular loop 3 (IC3) and transmembrane domain 6 (TM6). A non-endogenous amino acid, X, is substituted for an endogenous residue in IC3 at a position 16 amino acids N-terminal of an endogenous residue in IC3 at a position 16 amino acids N-terminal of an endogenous amino acid is selected from Lys, His, Arg or AA)15-Pro. The endogenous amino acid is selected from Lys, His, Arg or Lys, this residue is replaced by His, Arg or preferably Lys. When the endogenous residue at this position is Lys, this residue is replaced by His, Arg or preferably has con-endogenous in on-endogenous, or a mixture of endogenous and non-endogenous residues. The constitutively active GPCRs are useful for identifying antagonists, agonists and partial agonists for use as electings for elucidating the roles of the receptors in normal and setting diseases and disorders associated with that receptor. Because the novel mutant GPCRs are constitutively active, they can be used directly for screening of compounds without the need for endogenous considers and disorders associated with that receptor. Because the novel mutant GPCRs are constitutively active, they can be used the novel mutant deciders associated with that receptor. Because the novel mutant GPCRs are constitutively active, they can be used the nead for endogenous and a normal and a disorders associated with the need for endogenous and the nead for endogenous and the nead for endogenous and nead for a particular GPCRs are constitutively active, they can be useful for the nead for endogenous and nead for endogenous and nead for endogenous and nead for endogenous and and nead for endogenous and and nead for endogenous and and nead for endogenous and and nead for endogenous and and human GPCRs of the invention. AAY90652 AAY90652 AAY9

AA; Sequence us-10-041-615-34.rag

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                                                              96 WPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIW 155
                                                                                                            157 VVVAVAMAPLLVSPQTVQTNHTVVČLQLYREKAŠ-----HHALVSLAVAFTFPFITTVTČ 211
                                                                                                                             YMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFMARGMLHL 274
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                                                                         TLVLLQTMPLLLIMPMTKPLVGKLACME-YSSMESVLGLPLMVLVAFAIGFCGPVGIILSC
                                36 FYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSS
21.1%; Score 395.5; DB 21; Length 339; 30.5%; Pred. No. 2e-33; ive 57; Mismatches 142; Indels 17;
                                                                                                                                                                                                                                                                                                                      Primer; seven transmembrane receptor; receptor; amplification.
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/label≈ Transmembrane domain.
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193..217
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                                                                                                                                                                                                                                                                                                        Seven transmembrane receptor (R12).
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(first entry)
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                 95; Conservative
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Query Match
Best Local Similarity
Matches 95; Conserv
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07-PBB-1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pCR using two primers (AAQG6174, AAQG6175) was performed to amplify a partial sequence of the R20 seven transmembrane coding sequence which was later used as a probe for isolating the R20 genomic clone (AAQG6176) from a human placenta DNA library. During the isolation of the R20 gene, two weakly hybridising sequences were identified which had significant homology to other seven transmembrane receptors. The probe was used to screen a human genomic foetal liver DNA library, and while the R20 gene could not be identified in this library, several weakly hybridising clones were plaque purified, subcloned and sequenced. The two clones were designated R2 (AAG66177) and R12. This is the sequence encoded by the R12 clone. (Updated on 25-MAR-2003 to correct PN field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               156 TLVTLQTMPLLLMPMTKPLVGKLACME-YSSMESVLGLPLMVLVAFAIGFCGPVGIILSC
DNA encoding seven trans:membrane receptors - used to develop prods. for use as therapeutic or diagnostic agents for conditions involving the receptors.
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antagonist; haemophilia; wound healing; restenosis; angina;
inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20.9%; Score 391.5; DB 15; Length 30.5%; Pred. No. 5.4e-33; ive 57; Mismatches 142; Indels
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                                                                                                                                  English.
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                                                                                                                                  Example 10; Page 81-82; 100pp;
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Best Local Similarity 30.5%
Matches 95, Conservative
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us-10-041-615-34.rag

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212 YLLIIRSLRQGLRVE-----KRLKTKAVRMIAIVLAIFLVCFVPYHVNRSVYVLHYRSHG 266
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents the human R12 protein which is encoded by the full length genomic R12 clone (AAV18356) which was isolated from a human genomic fetal liver DNA library. The invention claims for the full length V28 genomic DNA sequence (AAV18343) isolated from a human placenta genomic library. The V28 (AAW48722) and R12 proteins are seven transmembrane (T7M) receptors which are probably involved in signal transduction. The invention also claims that cells transformed with V28 DNA can be used to produce the recombinant polypeptide, to produce antigonists or in screening assays for V28 agonists or antagonists or antagonists or antagonists conditionally then be used to modulate V28 receptor-ligand binding, for e.g. in immunological and/or inflammatory events in vivo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96 WPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 215 YMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKOFMARGMLHL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA encoding V28 seven transmembrane receptor polypeptide - useful for producing recombinant polypeptide and anti-V28 antibodies, and in screening assays for V28 agonists and antagonists
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                                                                                                                                                                                                                                                   /note= "Transmembrane domain 6"
290..312
/note= "Transmembrane domain 7"
                        'note= "Transmembrane domain 1"
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/note= "Transmembrane domain 3"
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                                                                                                                                                       "Transmembrane domain 4"
                                           68..90
/note= "Transmembrane domain
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N-PSDB; AAV18356.
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Matches 95; Conserv
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immunology; inflammation; R12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97 WPFGEIACRLTGFLFYLNMYASIYFLTCISADRFLAIVHPVKSLKCRRPLYAHLACAFLW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PSCAERRAFILSLQATVALMNMNCGITPIIYFFASTHYRKWLLGIL---KLKG---SSSS
                                                                                                                                                                                                                                                                                                                                                           A novel human 7-transmembrane receptor (AAW07617) has been putatively identified as a G-protein thrombin receptor. Its amino acid sequence was deduced from a cDNA clone (AAT44092) discovered in a human infant brain cDNA library. Recombinant receptor can be produced in host cells (e.g. B. coli, COS-7, Sf9) and used to raise antibodies or to screen for (anti Jagonist cpda. Agonists can be used to treat e.g. haemophilia or to promote wound healing; antagonists can be used to treat inflammation, angina,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           157 VVVAVAMAPLLVSPOTVOTNHTVVČLQLÝREKAŠ-----HHALVSLÁVAFTFPFITTVTČ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFMARGMLHL
                                                                                                                                                                                                                           Human G-protein thrombin receptor, HIBEB69 - useful to identify (ant) agonists, for treatment of angina, restenosis, wound healing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20.9%; Score 391.5; DB 18; Length 339; 30.5%; Pred. No. 5.4e-33; ative 57; Mismatches 142; Indels 17;
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                                                                 (HUMA-) HUMAN GENOME SCI INC.
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Best Local Similarity
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                                                                                                                                                                                  N-PSDB; AAT44092
                        06-JUN-1995;
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PSCAERRAFLLSLQATVALMMWNCGITPIIYFFASTHYRKWLLGIL---KLKG---SSSS
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                                                                                                                                                                                                                              Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is a novel seven transmembrane (7TM) receptors (also known as heptahelical, serpentine or G-protein-coupled receptors). The coding sequence for the present sequence may be used for gene therapy for diseases such as cancer.
ASCATQRILALANRITSCLTSLNGALDPIMYFFVAEKFRHALCNLLCGKRLKGPPPSFEG 326
                                                                                                                                                                                                                                                                                                                                                                                           Polymucleotide encoding seven transmembrane receptors, antibody specific to the receptor, agonist and antagonist of the receptor useful for treating inflammation in a mammal
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                                                                                                                                                         Seven transmembrane receptor; 7TM; heptahelical; serpentine; G-protein-coupled; V28; V31; V112; R20; R2; R12; RM3; gene therapy; cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 21; Length 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20.9%; Score 391.5; DB 21; Length 30.5%; Pred. No. 5.4e-33; tive 57; Mismatches 142; Indels
                                                                                                                                           Human 7TM receptor R12 cDNA clone protein.
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                                                                                                                                                                                                                                                                                                                                                Godiska R;
                                                                                    AAB21697 standard; Protein; 339 AA.
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98US-0088337.
92US-0977452.
93US-0153848.
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                                                                                                                           (first entry)
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                     329 SSSSSSTPGKA 339
                                       327 KTNESSLSAKS 337
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Matches 95; Conserva
                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-571335/53.
N-PSDB; AAA91725.
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The invention relates to constitutively active, non-endogenous versions of endogenous human orphan G protein-coupled receptors (GPCRs, AAY90643-CC AAY90677 and AAY90643-DAY90677 and AAA30779). The mutant proteins of the invention contain a and AAA30779). The mutant proteins of the invention contain a mutation in a portion of the protein comprising intracellular loop 3 (CC3) and transmembrane domain 6 (TM6). A non-endogenous amino acid, X, is substituted for an endogenous residue in IC3 at a position 16 amino acids N-terminal of an endogenous proline in TM6 to form a sequence of X-(AA)15-pro. The endogenous amino acid is selected from Lys, His, Arg or Ala, and is preferably Lys. When the endogenous residue at this constitution acid stretch between the substituted amino acid and the Prome and selected from Lys, His, Arg or Ala, and is preferably Lys. When the substituted amino acid and the Prome are also acid stretch between the substituted amino acid and the Prome and partial agonists for use as the mutant proteins are also useful for settings for elucidating the mutant proteins are also useful for settings for elucidating the roles of the receptors in normal and size and disorders associated with that receptor. Because the endogenous and disorders associated with that receptor. Because the novel mutant OPCRs are constitutively active, they can be used directly for screening of compounds without the need for endogenous and ligands. The presents a human wild-type GPCR referred to in an exemplification of the invention.
267 ASCATQRILALANRITSCLTSINGALDPIMYFFVAEKFRHALCNLLCGKRLKGPPSFEG 326
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G protein-coupled receptor; GPCR; constitutively active;
intracellular loop 3; transmembrane domain 6; drug screening;
agonist; antagonist.
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96 WPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIW 155
                                                                                                                                                                                                           156 TLVLLQTMPLLLMPMTKPLVGKLACME-YSSMESVLGLPLMVLVARAIGFCGPVGIILSC 214
                                                                                                                                                                                                                                    215 YMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFMARGMLHL 274
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                                                                                                                                                             267 ASCATQRILALANRITSCLTSLNGALDPIMYFFVAEKFRHALCNLLCGKRLKGPPPFFEG 326
                                                                                           36 FYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSS 95
Ouery Match 20.9%; Score 391.5; DB 21; Length 339;
Best Local Similarity 30.5%; Pred. No. 5.4e-33;
Matches 95; Conservative 57; Mismatches 142; Indels 17; Gaps
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Search completed: February 19, 2004, 19:33:00 Job time : 45 secs

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ALIGNMENTS
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; Sequence 4, Application US/08383750
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Best Local Similarity 38.55
Matches 132; Conservative
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              GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
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US-09-170-4960-18
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US-08-183-311153-44
US-09-180-2
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US-08-485-886-220
US-08-477-362-220
US-08-477-134-220
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Listing first 45 summaries
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US-08-473-489A-220
US-08-474-410-7
US-08-485-695-220
US-08-121-101-3
US-08-13-974B-56
US-08-513-974B-56
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APPLICANT: Li et al., TITLE OF INVENTION: Human G-Protein Coupled Recipies REFERENCE: 1488-1220000; CURRENT FILING DATE: 1997-05-04, NUMBER OF SEQ ID NOS: 18
NUMBER OF SEQ ID NOS: 18
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 17
LENGTH: 348
TYPE: RT
CREATION OF SEQ ID NOS: 18
TYPE: RT
USGANISM: Genomic
US-08-852-824-17
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KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYL 120
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                                GENERAL INFORMATION:
APPLICANT: Birkenbach, Mark
APPLICANT: Kieff, Elliot
TITLE OF INVENTION: Epstein Barr Virus Induced Genes
NUMBER OF SECTENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Pox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IS PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION JATA:
APPLICATION NUMBER: US/08/383,750
                                                                                                                                                                                                          STREET: Sterne, Kessler, Goldstein & Fox STREET: 1100 New York Avenue, N.W., STREET: Suite 600
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FR: 0627.3300001
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ATTORNEY/AGENT INFORMATION:
NAME: FOX, Samuel, L.
REGISTRATION NUMBER: 30,353
REFERENCE/DOCKET NUMBER: 0627
TELEPHONE: (202) 371-260
TELEPHONE: (202) 371-260
TELEPHONE: (202) 371-260
TELEPHONE: CRARACTERISTICS:
LENGTH: 361 amino acids
TYPE: amino acids
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; Sequence 4, Application US/08352678
; Patent No. 6043351
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APPLICANT: Birkenbach, Mark
APPLICANT: Kieff, Elliott
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Best Local Similarity 37.8'
Matches 135; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy di
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Patent No. 5744301
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-383-750-4
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61 KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYL 120
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33.7%; Score 632.5; DB 3; Length 3
Best Local Similarity 37.8%; Pred. No. 6.2e-39;
Matches 135; Conservative 74; Mismatches 141; Indels
TITLE OF INVENTION: EPSTEIN BARR VIRUS INDUCED GENES NUMBER OF SEQUENCES: CORRESPONDENCE ADDRESS: ADDRESSEE: Wolf, Greenfield & Sacke, P.C.
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| Patent No. 650026
| GENERAL INFORMATION:
| APPLICANT: Birkenbach, Mark APPLICANT: Kieff, Bliott
| APPLICANT: Rieff, Bliott
| TILE OF INVENTION: EPSTEIN BARR VIRUS INDUCED GENES
                                                                                                                                                                                                                                                                                      COMPUTER: ITEM FOR compatible
COMPUTER: IEM FC compatible
COMPUTER: IEM FC compatible
COMPUTER: PatentIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/352,678
FILING DATE: 30-NOV-1994
CLASSIFTCATION DATA:
PRICATION NUMBER: US 07/980,518
FILING DATE: 25-NOV-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B0801/7044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Gates, Edward R. REGISTRATION NUMBER: 31,616 REFERENCE/DOCKET NUMBER: B06 TELECOMMUNICATION INFORMATION: TELEPHONE: 617-720-3500
                                                                                                     600 Atlantic Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617-720-2441
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                       Floppy disk
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amino acid
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                                                                                                                                        Boston
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61 KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYL 120
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                                                                                                                                                                                                                                                                                                                                                      Length 361;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Birkenbach, Mark
APPLICANT: Kieff, Elliot
TITLE OF INVENTION: Epstein Barr Virus Induced Genes
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                           33.7%; Score 632.5; DB 4;
37.8%; Pred. No. 6.2e-39;
tive 74; Mismatches 141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREE: Sterne, Kessler, Goldstein & Fox STREE: 1100 New York Avenue N.W., Suite 600 STATE: D.C. COUNTRY: U.S. A. Z.TO.T.
FILE REFERENCE: AREA-0040
CURRENT APPLICATION NUMBER: US/09/170,496D
CURRENT FILING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 294
SOFTWARE: Patentin version 3.1
SEQ ID NO 78
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APPLICATION NUMBER: PCT/US93/09636
FILING DATE: herewith
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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GENERAL INFORMATION:
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TELEPHONE: (202) 371-2600
TELEPHONE: (202) 371-2540
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity 37.8°
Matches 135; Conservative
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MEDIUM TYPE: Floppy
                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
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PCT-US93-09636-4
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Patent No. 6555339
Patent No. 6555339
Patent No. 6555339
Patent No. 6555339
APPLICANT: Chalmers, Derek T.
APPLICANT: Liaw Chen W.
APPLICANT: Liaw Chen W.
TITLE OF INVENTION: No. 6555339-Endogenous, Constitutively Activated Human G Protein-
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; Pred. No. 6.2e-39;
74; Mismatches 141;
                                                                                                                                                                                                                                                      PatentIn Release #1.0, Version #1.25
                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Wolf, Greenfield & Sacks, P.C.
STREET: 600 Atlantic Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                               31,616
ER: B0801/7044
                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/536,954
                                                                                                                                                                                                                               PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/352,678
                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: GATES, Edward R.
REGISTRATION NUMBER: 31,616
REFERRNCE/POCKET NUMBER: B080
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-720.3500
                                                                                                                                                                                         : Floppy disk
IBM PC compatible
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Similarity 37.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 617-720-2441
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
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amino acid
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Best Local Similarity 37.8
Matches 135; Conservative
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                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                COMPUTER: IBM PC OPERATING SYSTEM:
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                                                                                                                               USA
                                                                                     Boston
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US-09-170-496D-78
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                                                                                                                                                                                                                                                          SOFTWARE:
                                                                                                           STATE: M. COUNTRY:
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Squence 182, Application US/09170496D
Patent No. 6555339
GENERAL INFORMATION:
APPLICANT: Chalmer, Derek T.
APPLICANT: Chalmer, Derek T.
APPLICANT: Chalmer, Chan W.
TITLE OF INVENTION: Receptors
TITLE OF INVENTION: Receptors
TITLE OF INVENTION: Receptors
TITLE OF INVENTION: Receptors
CURRENT APPLICATION NUMBER: US/09/170,496D
CURRENT FILING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 294
SSO ID NOS: 294
SSO ID NO 182
242 AKNTIILIIVVFVICFTPYHVAIIQHMIKKIRPSNFIEGSQRHSFQISLHFTVCLMNFNC 301
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                                                                                                                                                                                              302 CMDPFIYFPACKGYKRKVMRMLKRQVSVSISSAVKSAPEBNSREMTETQMMIHSKSS 358
                                                                                                                                    299 GITPIIYFFASTHYRKWLLGILKLKGSSSSSSSSSTPGKAS---SETPSITQARGS 352
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30.5%; Pred. No. 1.1e-21;
tive 57; Mismatches 142; Indels 17; Gaps
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Patent No. 5759804
GENERAL INFORMATION
APPLICANT: Godiska, Romald
APPLICANT: Gray, Patrick W.
TITLE OF INVENTION: No. 5759804el Seven Transmembrane Receptors
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Bicknell;
ADDRESSEE: Bicknell;
STREET: 6300 Sears Tower, 233 South Wacker Drive
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95; Conservative
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ORGANISM: Homo sapiens
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CITY: Chicago
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US-08-153-848-44
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Best Local
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Patent No. 6555339
GRNERAL INFORMATION:
APPLICANT: Behan, Dominic P.
APPLICANT: Chalmers, Derek T.
APPLICANT: Chalmers, Derek T.
APPLICANT: Liaw, Chen W.
TITLE OF INVENTION: Receptors
FILE REFERENCE: AREN-0040
CURRENT APPLICATION NUMBER: US/09/170,496D
CURRENT APPLICATION NUMBER: US/09/170,496D
CURRENT APPLICATION NUMBER: 1998-10-13
NUMBER OF SEQ ID NOS: 294
SOFTWARE: Patentin version 3.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 MEYSSMESVLGIPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR 240
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                                                                                                                                                                                              Gaps
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                                                                                             33.7%; Score 632.5; DB 5; Length 361; 37.8%; Pred. No. 6.2e-39;
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                                                                                                                               37.8%; Pred. No. 6.2e->>;
tive 74; Mismatches 141; Indels
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Best Local Similarity 37.8%
Matches 135; Conservative
                                                                                                                                         Best Local Similarity 37.8 Matches 135; Conservative
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US-09-170-496D-206
         PCT-US93-09636-4
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LENGTH: 361
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                                                                                                 Query Match
Best Local {
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US-09-299-843A-44
; Sequence 44, Application US/09299843A
; Patent No. 6107475
; GENERAL INFORMATION:
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amino acid
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Best Local Similarity 30.5%
Matches 95; Conservative
3174 Porter Dr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: peptide IMMEDIATE SOURCE:
                                                                               ZIP: 94304
COMPUTER READABLE FORM
MEDIUM TYPE: Disket
                   Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIAL General LIBRARY: General 992700
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                                                             USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97 WPFGEIACRLTGFLFYLMMYASIYFLTCISADRFLAIVHPVKSLKLRRPLYAHLACAFLW 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              156 TLVLLQTMPLLLLMPMTKPLVGKLACME-YSSMESVLGLPLMVLVAFAIGFCGPVGIILSC 214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      157 VVVAVAMAPLLVSPQTVQTNHTVVČLQLÝREKAS----HHAĽVSLÁVAFTFPFITTVTČ 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                215 YMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFMARGMLHL 274
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     267 ASCATORILALANRITSCLTSINGALDPIMYFFVAEKFRHALCNLLCGKRIKGPPPSFEG 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36 FYTALLVFSALGNILALCLTCOKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20.9%; Score 391.5; DB 1; Length 339; 30.5%; Pred. No. 2.1e-21;
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Sequence 3, Application US/08812871

Patent No. 5955303

PAPLICANT: Au-Young, Janice

APPLICANT: Muzong Cheng,
TITLE OF INVENTION: NOVEL HUMAN CHEMOKINE RECEPTOR-LIKE

TITLE OF INVENTION: NOVEL HUMAN CHEMOKINE RECEPTOR-LIKE

TITLE OF INVENTION: PROTEIN

NUMBER OF SEQUENCES: 3

CORRESPONDENCE ADDRESS:

ADDRESSEE: Incyte Pharmaceuticals, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/153,848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    57; Mismatches 142;
                                                                                                                                                                                                                   CLASSIPICATION: 3.2.
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
APPLICATION NUMBER: 07/977,452
FILING DATE: 17-NOV-1992
ATORNEY,AGENT INFORMATION:
NAME: No. 575904am. Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31794
TELECOMMUNICATION INFORMATION:
TELEFHONE: (312) 474-640
TELEFAX: (5-3856
INFORMATION FOR SEQ ID NO: 444:
SEQUENCE CHARACTERISTICS:
TENETH 339 amino acide
                                                                          E: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     : 339 amino acids
amino acid
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Best Local Similarity 30.5'
Matches 95; Conservative
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                                                             COMPUTER READABLE FORM:
Illinois
                                                                                                                                                                                                      FILING DATE:
CLASSIFICATION:
                                                                               MEDIUM TYPE:
                                     90909
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96 WPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVALW 155
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APPLICANT: Gray, Patrick W
APPLICANT: Growelkart, Vicki L
TIPLE OF INVENTION: No. 6107475el Seven Transmembrane Receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17;
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MEDIUM TYPE: Diskette
COMPUTER: IBM Comparible
OPERATING SYSTEM: DOS
SOFTWARE: FastERQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/812,871
FILING DATE: Filed Herewith
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PE-0237 US
REGISTRATION NUMBER: 36,749
REGISTRATION NUMBER: 36,749
REGISTRATION NUMBER: 36,749
REGISTRATION NUMBER: 36,749
REGISTRATION NUMBER: PF-0237 US
TELEPHONE: 415-85-055
TELEPHONE: 415-85-055
INFORMATION: OF SEQ. 1D NO: 3:
SEQUENCE CHARACTRISTICS:
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TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 44:
US-09-088-337B-44
               Sequence 44, Application US/09088337B
Patent No. 6348574
GENERAL INFORMATION:
APPLICANT: Godieka, Ronald
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (312) 474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
LENGTH: 339 amino acid
TYPE: amino acid
                                                                                                                                                                                                                                       CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                          COUNTRY: USA
US-09-088-337B-44
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TLVLLQTMPLLLMPMTXPLVGKLACME-YSSMESVLGLPLMVLVAFAIGFCGPVGIILSC 214
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      YMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFWARGMLHL 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             275 PSCAERRAFLLSLQATVALMNNCGITPIIYFFASTHYRKWLLGIL---KLKG---SSSS 328
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36 FYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSS 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20.9%; Score 391.5; DB 3; Length 30.5%; Pred. No. 2.1e-21; ive 57; Mismatches 142; Indels
                                 ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: 111inois
COUNTRY: USA
                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/299,843A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Jill E. Uhl
REGIGTRATION NUMBER: 43,213
REFERENCE/DOCKET NUMBER: 27866/32059B
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/088,337
FILING DATE: 01-JUN-1998
PRIOR APPLICATION NUMBER: US 08/153,848
FILING DATE: 17-NOV-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/977,452
FILING DATE: 17-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: Jill E. Uhl
                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 44: SEQUENCE CHARACTERISTICS: LENGTH: 339 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 339 amino acida
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-299-843A-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (312) 474-0448
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 NUMBER OF SEQUENCES: 6
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Best Local Similarity
Matches 95; Conserv
                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                  90909
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97 WPPGEIACKLIGFLFYLIMYASIYFLTCISADRFLAIVHPVKSLKLRRPLYAHLACAFLW 156
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      156 TLVLLQTMPLLLMPWTKPLVGKLACME-YSSMESVLGLPLMVLVAFAIGFCGPVGIILSC 214
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Gray, Patrick W.
Schweikart, Vicki L.
FITLE OF INVENTION: No. 6348574el Seven Transmembrane Receptors
NUMBER OF SEQUENCES: 66
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 339;
                                                                                                                                                                                                           STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                          ZIP: 60606
COMPUTER READBALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                        ADDRESSEE: Marshall, O'Toole, Gerstein, Murray
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 20.9%; Score 391.5; DB 4; Best Local Similarity 30.5%; Pred. No. 2.1e-21; Matches 95; Conservative 57; Mismatches 142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/088,337B
FILING DATE: 01-70m.n.
PRIOR APPLICATION NUMBER: US/09/088,337B
APPLICATION NUMBER: US/08/153,848
APPLICATION NUMBER: US/09/77,452
ATTORNEY/AGBVT INFORMATION:
NAME: NO. 6348574and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31794
TELECOMUNICATION NUMBER: 31794
TELECOMUNICATION NUMBER: 31794
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212 YLLIIRSLRQGLRVE-----KRLKTKAVRMIAIVLAIFLVCFVPYHVNRSVYVLHYRSHG 266
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SEGUERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: DI, YIL
APPLICANT: GCAYNE, JEANINE D
APPLICANT: GCAYNE, JEANINE D
APPLICANT: GCAYNE, JEANINE D
APPLICANT: GCAYNE, JEANINE D
APPLICANT: GCAYNE, JEANINE D
APPLICANT: GCAYNE, JEANINE D
APPLICANT: GCAYNE, JEANINE D
APPLICANT: GCAYNE, JEANINE D
APPLICANT: GTENINE, BAIN, GILFILLAN, CECCHI,
ADDRESSEE: GARELLA, BYNNE, BAIN, GILFILLAN, CECCHI,
STREET: G BECKER FARM ROAD
COTY: CTTY: ROSELAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                        OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/11153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ed. No. 2.1e-21;
Mismatches 142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 391.5;
Pred. No. 2.1
                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/977,452
FILING DATE: 17-NOV-1992
ATTOMEN AGENT INFORMATION:
NAME: Noland, Greta E.
REGISTRATION NUMBER: 35,302
                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 31794
TELECOMMUNICATION: INFORMATION:
TELEPHONE: (312) 474-6300
TELEFAX: (312) 474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57;
                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 30.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              339 amino acids
amino acid
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                                                                                                                            FILING DATE:
CLASSIFICATION:
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STATE:
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                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Behan, Dominic P.
APPLICANT: Chalmers, Derek T.
APPLICANT: Liaw, Chen W.
TITLE OF INVENTION: No. 6555339-Endogenous, Constitutively Activated Human G Protein-
TITLE OF INVENTION: Receptors
FILE REFERANCE: AREN 0040
CURRENT FILIANT APPLICATION NUMBER: US/09/170,496D
CURRENT FILIANT GAPE: 1998-10-13
NUMBER OF SEQ ID NOS: 294
SOFTWARE: PATENTIN version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                267 ASCATQRILALANRITSCLTSINGALDPIMYFFVAEKFRHALCNLLCGKRLKGPPPSFEG 326
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Godiska, Ronald
APPLICANT: Gray, Patrick W.
APPLICANT: Schweikart, Vicki L.
IITLE OF INTENTION: Novel Seven Transmembrane Receptors
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
ADDRESSEE: Bicknell
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57; Mismatches 142; Indels
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                                                                                                                      5-09-170-496D-32
Sequence 32, Application US/09170496D
Patent No. 6555339
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95; Conservative
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327 KTNESSLSAKS 337
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
CRGANISM: Homo sapiens
US-09-170-496D-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 95; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 32
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96 WPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIW 155
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30.5%; Pred. No. 2.1e-21;
iive 57; Mismatches 142; Indels 17; Gaps
COMPUTER: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07180
FILING DATE: 06-UUNE-1995
GIASSIPTATION:
ATTORNEY/ACENT
                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: MULLINS, J.G.
REGISTRATION NUMBER: 30,073
REFERENCE/DOCKET NUMBER: 325800-366
FELECOMMUNICATION INFORMATION:
FELECOMMUNICATION INFORMATION:
FELECOMMUNICATION INFORMATION:
FELECOMMUNICATION INFORMATION:
FELECOMMUNICATION OF SEQ 1D NO: 2:
FELECOMMUNICATION OR SEQ 1D NO: 2:
FELECOMMUNICATION OR SEQ 1D NO: 2:
FERGETH 339 amino acids
TYPE: amino acid
TYPE: amino acid
TYPE: mino acid
TYPE: MOLECULE TYPE: protein
PCT-US95-07180-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 20.9*
Best Local Similarity 30.5*
Matches 95; Conservative
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Search completed: February 19, 2004, 19:35:29 Job time : 22 secs

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February 19, 2004, 19:33:05; Search time 40 Seconds (without alignments) 1884.441 Million cell updates/sec
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1876
1 MIKLGPYFTPPTKIKTKIKD......SETPSITQARGSMFLAEHVV 360
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(cgn2 6/prodate/1/pubpaa/US07_PUBCOMB.pep:*
(cgn2 6/prodate/1/pubpaa/US06_NEW_PUB.pep:*
(cgn2 6/prodate/1/pubpaa/US06_NEW_PUB.pep:*
(cgn2 6/prodate/1/pubpaa/US06_PUBCOMB.pep:*
(cgn2 6/prodate/1/pubpaa/US06_PUBCOMB.pep:*
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(cgn2 6/prodate/1/pubpaa/US08_NEW_PUB.pep:*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                   801455 seqs, 209382283 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                               OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                      Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                                            BLOSUM62
                                                                                                                                                                                                                                          Title:
Perfect score:
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                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Sequence 112, App Sequence 206, App Sequence 95, Appl Sequence 12, App Sequence 12, Appl Sequence 2, Appli Sequence 34, Appl Sequence 1620, Ap Sequence 1294, Ap Sequence 109, Appl Sequence 17, Appl Sequence 110, App Sequence 2, Appli Sequence 78, Appl Sequence 17, Description 2 US-10-041-615-34 2 US-10-07-161-1620 2 US-10-022-791294 2 US-10-041-615-109 US-09-827-937A-17 2 US-10-041-615-110 5 US-10-222-024-5 5 US-10-225-385-78 5 US-10-255-567A-112 5 US-10-251-385-206 1 US-09-791-932-95 5 US-10-251-385-206 1 US-09-791-932-95 5 US-10-251-385-206 1 US-09-7848-889-12 SUMMARIES Query Match Length DB Score

Sequence 4, Appli

US-09-828-478-4

Sequence 8, Appli Sequence 14, Appli Sequence 12, Appl Sequence 14, Appl Sequence 14, Appl Sequence 112, Appl	Sequence 5.7 Appli Sequence 6, Appli Sequence 111, App Sequence 304, App Sequence 113, App Sequence 125, Appl Sequence 188, Appl Sequence 25, Appl	60	Sequence 4, Appli Sequence 56, Appl Sequence 10, Appl Sequence 1288, Ap Sequence 223, App Sequence 479, App Sequence 21, Appl
12 US-09-991-225-8 12 US-10-349-021-4 12 US-10-100-982-12 12 US-10-268-332-14 12 US-09-964-821B-14 12 US-09-041-821B-14	15 US-10-221-325-32 12 US-09-828-478-6 12 US-10-349-021-6 15 US-10-041-615-111 15 US-10-225-567A-304 11 US-09-779-679-25 12 US-09-801-9448-198	US-09-782-980-80 10 US-09-884-430-4 12 US-10-17-4-443-3 15 US-10-225-567A-324 15 US-10-36-489-4 15 US-10-17-223-130 12 US-10-10-568-12	15 US-10-311-956-4 12 US-10-278-087A-56 12 US-10-354-358-10 12 US-09-745-842-18 12 US-10-295-67A-23 15 US-10-255-567A-23 12 US-09-886-509-479 15 US-09-886-509-479
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1168 391 118 391 119 391 129 391 120 391	223 391. 224 391. 225 391. 227 384.		44 44 32 32 32 33 32 33 33 33 33 33 33 33 33

ALIGNMENTS

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APPLICANT: Casman, Stacie J
APPLICANT: Casman, Stacie J
APPLICANT: Edinger, Shlomit R
APPLICANT: Edinger, Shlomit R
APPLICANT: Balterman, Karen
APPLICANT: Smithson, Gleenda
APPLICANT: Mithson, Gleenda
APPLICANT: Padigaru, Muralidhara
APPLICANT: Padigaru, Muralidhara
APPLICANT: Padigaru, Muralidhara
APPLICANT: Padigaru, Muralidhara
APPLICANT: Padigaru, Muralidhara
APPLICANT: Padigaru, Muralidhara
APPLICANT: Danger: 2003-001-29
PRIOR FILING DATE: 2001-01-03
PRIOR PELICATION NUMBER: 60/259,552
PRIOR APPLICATION NUMBER: 60/260,544
PRIOR PILING DATE: 2001-01-03
PRIOR PILING DATE: 2001-01-03
PRIOR PILING DATE: 2001-03-20
NUMBER OF SEQ ID NOS: 174
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                        Sequence 34, Application US/10041615
Publication No. US20040014038A1
GENERAL INFORMATION:
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US-10-041-615-34
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LENGTH: 360
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Best Local
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301 TPIIYFFASTHYRKWLLGILKLKGSSSSSSSSSTPGKASSETPSITQARGSWFLABHVV 360
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                                                                                                                    121 MACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPWTKPLVGKLAC 180
                                                                                                                                                                                                                                                                                              GCLLTLLMLVAVVVCFSPYHLNIKQFMARGMLHLPSCAERRAFLLSLQATVALMNMNCGI 300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   48 GVCALHRHL-----RGYYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVTL 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161 QTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLMVLVAFAIGFCGFVGIILSCYMKITW 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              102 QTWPLLIMPMTKPLVGKLACMEYSSMESVLGLPLWVLVAFAIGFCGPVGIILSCYMKITW 161
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   162 KICSTAGRIQTAREDPVTSGKGRHRRD------SPGGPSDQQBRIPLARLP 206
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                                                                              MACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLAC 180
                                                                                                                                                                                        181 MEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR 240
                                                                                                                                                                                                                                         181 MEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR 240
                             61 KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYL 120
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58; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1620, Application US/10017161

Publication No. US20030143668A1

GENERAL INPORMATION:

APPLICANT: SUWA, MAKIKO

APPLICANT: AKIYAWA, YUTAKA

APPLICANT: AKIYAWA, YUTAKA

TITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTORS

FILE REFERENCE: 084335/015

CURRENT APPLICATION NUMBER: US 2002-12-18

FRICK FILING DATE: 2001-06-18

FRICK FILING DATE: 2001-06-18

NUMBER OF SEQ ID NOS: 2430

SOFTWARE PARENT OFT.

BRICK FILING DATE: 2001-06-18

NUMBER OF SEQ ID NOS: 2430

SOFTWARE: PARENT NOVEL C 118

SEQ ID NOS: 233

LENGTH: 323
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Matches 19
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Sequence 1294, Application US/10292798 ; Publication No. US20030235833A1 ; GENERAL INFORMATION:

US-10-292-798-1294

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APPLICANT: Casman, Stacie J
APPLICANT: Casman, Stacie J
APPLICANT: Bdinger, Shlomit R
APPLICANT: Bileran, Raren
APPLICANT: Blinger, Shlomit R
APPLICANT: Blinger, Shlomit R
APPLICANT: Blinger, Muralidhara
APPLICANT: Rekuda, Ramesh
APPLICANT: Padigaru, Muralidhara
APPLICANT: Padigaru, Muralidhara
APPLICANT: Padigaru, Muralidhara
TITLE OF INVENTION NO. US20040014038Alel GPCR-Like Proteins and Nucleic Acids Encodi
FILE REFERENCE: 21402-233-061
CURRENT PILING DATE: 2003-01-29
PRIOR APPLICATION NUMBER: 60/259,552
PRIOR PILING DATE: 2001-01-03
PRIOR PILING DATE: 2001-01-03
PRIOR FILING DATE: 2001-01-03
PRIOR FILING DATE: 2001-01-03
PRIOR FILING DATE: 2001-03-20
NUMBER OF SEQ ID NOS: 174
SOSTWARE CURASQUIST Version 0.1
APPLICANT: ASAI, TYOSHI
APPLICANT: AKIYANA, YUTAKA
APPLICANT: AKIYANA, YUTAKA
APPLICANT: ABURATANI, HIROYUKI
TITLE OB INVENTION: GIANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS
FILE REPERENCE: 084335/166
CUTRENT APPLICATION NUMBER: 10/017,161
PRIOR APPLICATION NUMBER: 10/017,161
PRIOR APPLICATION NUMBER: 10/017,161
PRIOR APPLICATION NUMBER: 10/017,161
PRIOR APPLICATION NUMBER: 10/017,161
PRIOR APPLICATION NUMBER: 2001-06-18
NUMBER OF SEQ ID NOS: 201-06-18
NUMBER OF SEQ ID NOS: 2010
SOFTWARE: PATENTIN Ver: 2.1
FROM TO 1294
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101 GLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLL 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  48 GVCALHRHL-----RGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVALWTLVLL 101
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65.7%; Pred. No. 4.7e-73;
tive 8; Mismatches 36; Indels 58
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 65.7%
Matches 195; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-292-798-1294
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US-10-041-615-109
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LENGTH: 229
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242 CLLTLLMLVAVVVCFSPYHLNIKQFMARGM--LHLPSCAERRAFLLSLQATVALMNMNCG 299
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                                                                                                                                                           119 YLMACVSVDHYPAVVCAHWGPRLRTAGRARINCVAIWTIVLLQTMPLLLMPMTKPLVGKL 178
                                                                                                                                                                                              118 YLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKL 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 INCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLM 121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRG 241
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                                                                               59 SRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGV
                                                                                                    66 SRKINCTGIYLVHLAVSDLLFTVALPGRVLAFRQGALQ--ADGVCALHRHL-----RGV
                                            Gaps
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Length 229;
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                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Li, Yi
APPLICANT: Ruben, Steven M.
ITLE OF INVENTION: Human G-Frotein Coupled Receptors
FILE REPERENCE: 1489.1220003
CURRENT APPLICATION NUMBER: US/09/827,937A
CURRENT FILING DATE: 2001-04-09
PRIOR FILING DATE: 1997-05-07
NUMBER OF SEQ ID NOS: 18
SOFTWARE: Patentin Ver. 2.0
SC ID NO 17
  Score 721; DB 12;
Pred. No. 3e-58;
5; Mismatches 12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 33.9%; Score 635.5; DB 9 Best Local Similarity 38.5%; Pred. No. 3.6e-50; Matches 132; Conservative 69; Mismatches 139
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US-10-041-615-110
S-10-040-615-110
, Sequence 110, Application US/10041615
; Publication No. US2004001403BA1
, GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                          Sequence 17, Application US/09827937A Patent No. US20020052043A1 GENERAL INFORMATION:
    Query Match
Best Local Similarity 85.1%;
Matches 143; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-827-937A-17
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US-09-827-937A-17
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APPLICANT: Smitheon, Glennda
APPLICANT: Smitheon, Glennda
APPLICANT: Kekuda, Ramesh
APPLICANT: Kekuda, Ramesh
APPLICANT: Kekuda, Ramesh
APPLICANT: Fadigaru, Muralidhara
TITLE OF INVENTION: US20040014038Alel GPCR-Like Proteins and Nucleic Acids Encod
FILE REFERENCE: 21402-233-061
CURRENT APPLICATION NUMBER: 60/259,552
PRIOR APPLICATION NUMBER: 60/259,552
PRIOR APPLICATION NUMBER: 60/260,544
PRIOR APPLICATION NUMBER: 60/277,405
PRIOR APPLICATION NUMBER: 60/277,405
PRIOR APPLICATION NUMBER: 60/277,405
NUMBER OF SEQ ID NOS: 174
SOPTWARE: CuraSeqList version 0.1
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Publication No. US20030104487A1
GENERAL INFORMATION
APPLICANT: Pfizer Ltd. (GB)
APPLICANT: Pfizer Ltd. (GB)
APPLICANT: Pfizer Ltd. (GB)
TITLE OF INVENTION: Neuropeptide receptor and uses thereof
FILE REPERENCE: PCS22032
CURRENT APPLICATION NUMBER: US/10/222,024
CURRENT APPLICATION NUMBER: GB 0119920.7
PRIOR APPLICATION NUMBER: GB 0119920.7
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37.8%; Pred. No. 7.1e-50;
rive 74; Mismatches 141; Indels
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 361
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Matches 135; Conservative
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ORGANISM: Homo sapiens
US-10-041-615-110
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US-10-222-024-2
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Sequence 112, Application US/10225567A

Sequence 112, Application US/10215567A

Sequence 112, Application No. US20030113798A1

GENERAL INFORMATION:

APPLICANT: LifeSpan Biosciences

APPLICANT: Burmer, Gleena C.

APPLICANT: Burmer, Gleena C.

APPLICANT: Roush, Christine L.

TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTOR

FILE REFERENCE: 1920-4-4

CURRENT APPLICATION NUMBER: US/10/225,567A

CURRENT APPLICATION NUMBER: 60/257,144

PRIOR PILING DATE: 2000-12-19

NUMBER OF SEQ ID NOS: 2292

SOFTWARE: Patentin version 3.1

SEQ ID NO 112.

LENGTH: 361
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Sequence 206, Application US/10251385
Publication No. US20030105292A1
GENERAL INFORMATION:
APPLICANT: Behan, Dominic P.
APPLICANT: Chalmers, Derek T.
APPLICANT: Liaw, Chen W.
TITLE OF INVENTION: Protein-Coupled
TITLE OF INVENTION: Protein-Coupled
TITLE OF INVENTION: Receptors
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  241 GCLLTLLMLVAVVVCFSPYHLNIKQFWARGM--LHLPSCAERRAFLLSLQATVALMNMNC 298
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                                                                                                                      302 CMDPILYPPACKGYKRKVMRMLKRQVSVSISSAVKSAPEENSREMTETQMMIHSKSS 358
                                                                                           299 GITPIIYFPASTHYRKWLLGILKLKGSSSSSSSSSSTPGKAS---SETPSITQARGS 352
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ORGANISM: Homo sapiens
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Publication No. US2003010529241

GENERAL INFORMATION:
APPLICANT: Dehan, Dominic P.
APPLICANT: Liaw, Chen W.
TITLE OF INVENTION: Protein-Coupled
TITLE OF INVENTION: Protein-Coupled
TITLE OF INVENTION: Protein-Coupled
TITLE OF INVENTION: Protein-Coupled
TITLE OF INVENTION: Protein-Coupled
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TITLE OF INVENTION: Protein-Coupled
TITLE OF INVENTION: Protein-Coupled
TITLE OF INVENTION: 202-09-20
PRIOR APPLICATION NUMBER: US/10/251,385
CURRENT FILING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 294
SOFTWARE: Patentin version 3.1
LENGTH: 161
LENGTH: 161
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                                                                                           2 IKLGPYFTPPTKI-KTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR 60
                                                                                                                                        3 IOMANNFTPPSATPQGNDCDLYAHHSTARIVM-PLHYSLVFIIGLVGNLLALVVIVQNRK 61
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es 141;
33.7%; Score 632.5; DB 15; 37.8%; Pred. No. 7.1e-50; ive 74; Mismatches 141;
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33.7%; Score 632.5; I
Best Local Similarity 37.8%; Pred. No. 7.1e-
Matches 135; Conservative 74; Mismatches
                        l Similarity 37.8
135; Conservative
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US-10-251-385-78
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Query Match
Best Local S:
Matches 135
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Sequence 182, Application US/10251385

Sequence 182, Application US/10251385

Publication No. U52003105292A1

GENERAL INFORMATION:

APPLICANT: Behan, Dominic P.

APPLICANT: Chalmers, Derek T.

APPLICANT: Liaw, Chen W.

ITILE OF INVENTION: Protein-Coupled

ITILE OF INVENTION: Receptors

ITILE OF INVENTION: Receptors

FILE REFERENCE: AREN-0040

CURRENT APPLICATION NUMBER: US/10/251,385

CURRENT FILING DATE: 1998-10-13

NUMBER OF SEQ ID NOS: 294

SOFTWARE PATENTIN VERSION 3.1

SEQ ID NO 182

LENGTH: 339
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Pred, No. 4.1e-28;
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Pred. No. 2e-30;
8; Mismatches
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1 Similarity 58.9%;
93; Conservative
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Best Local Similarity 30.5%
Marches 95, Conservative
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CRGANISM: Homo sapiens
US-10-251-385-182
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US-09-791-932-95
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APPLICANT: Vogeli, Gabriel
APPLICANT: Vogeli, Luis A.
APPLICANT: Parodi, Luis A.
APPLICANT: Helbech, Ronald R.
APPLICANT: Lind Perer
APPLICANT: Ruff, Valerie
APPLICANT: Ruff, Valerie
APPLICANT: Ruff, Valerie
APPLICANT: Wood, Linda S.
TITLE OF INVENTION: No. U320030003451Alel G Protein-Coupled Receptors Cross-Referen
TITLE OF INVENTION: No. 00235.US1
CURRENT APPLICATION NUMBER: US/09/791,932
CURRENT APPLICATION NUMBER: 60/184,305
PRIOR PILING DATE: 2000-02-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 33.6%; Score 630.5; DB 15; Length Best Local Similarity 37.8%; Pred. No. 1.1e-49; Matches 135; Conservative 74; Mismatches 141; Indels
                           CURRENT APPLICATION WHEER: US/10/251,385
CURRENT FILING DATE: 2002-09-20
PRIOR APPLICATION NUMBER: US/09/170,496
PRIOR FILING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 294
SOFTWARE: PatentIn version 3.1
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Publication No. US20030003451A1
GENERAL INFORMATION:
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APPLICATION NUMBER:
FILING DATE: 2000
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ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                          SEQ ID NO 206
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WPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIW 155
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                           157 VVVAVAMAPLLVSPQTVQTNHTVVCLQLYREKAS-----HHALVSLAVAFTFPFITTVTC
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YMKITWÄLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFWARGMLHL
                                                                              TLYLLQTMPLLLLMPMTKPLVGKLACME-YSSMESVLGLPLMVLVAFAIGFCGPVGIILSC
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20.9%; Score 391.5; DB 9; Length 339;
Best Local Similarity 30.5%; Pred. No. 9.5e-28;
Matches 95; Conservative 57; Mismatches 142; Indels 17
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| NAME/KEY: misc feature
| OTHER INFORMATION: Incyte ID No. US20020025555A1 G992700
US-09-848-8899-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 12, Application US/09848899
Patent No. US2002002555A1
GENERAL INFORMATION:
APPLICANT: Au-Young, Janice
APPLICANT: Guegler, Karl J.
APPLICANT: Cheng, Muzong
TITLE OF INVENTION: GPCR DIAGNOSTIC FOR BRAIN CANCER
FILE REFERENCE: PC-0042 CIP
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CURRENT FILING DATE: 2001-05-03
NUMBER OF SEQ ID NOS: 12
SOFTWARE: PERL Program
SEQ ID NO 12
LENGTH: 339
TYPE: PRT
ORGANISM: Homo sapiens
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Sequence 4, Application US/09828478;
Patent No. US20020155528A1
GENERAL INPORMATION:
APPLICANT: Xiao, Yonghong;
TITLE OF INVENTION: Protein
FILE OF INVENTION: Protein
FILE REPERENCE: 04974,00458;
CURRENT APPLICATION NUMBER: US/09/828,478
CURRENT FILING DATE: 2001-04-09;
PRIOR APPLICATION NUMBER: 60/195,196
PRIOR PILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 16
SOFTHARE: PastSEQ for Windows Version 4.0
SEQ ID NO 4
LENTH: 339
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                                                                                                                                                GENERAL INCORMATION:
APPLICANT: GLAXO GROUP LTD
TITLE OF INVENTION: ASSAY
FILE REPERENCE: P79011
CURRENT APPLICATION NUMBER: US/09/788,133
CURRENT FILING DATE: 2001-02-20
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin Ver: 2.1
SEQ ID NO 2
                                                                          Sequence 2, Application US/09788133 Patent No. US20020052001A1
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ORGANISM: homo sapiens
RESULT 14
JS-09-788-133-2
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215 YMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCRSPYHLNIKQFMARGMLHL 274
                                                                                                                156 TLVLLQTMPLLLMPMTKPLVGKLACME-YSSMESVLGLPLMVLVAFAIGFCGPVGIILSC 214
            36 FYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSS 95
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Search completed: February 19, 2004, 19:36:22 Job time : 41 secs us-10-041-615-34.rpr

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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OM protein - protein search, using sw model

February 19, 2004, 19:30:15; Search time 20 Seconds (without alignments) 1731.036 Million cell updates/sec Run on:

US-10-041-615-34 1876 1 MIKLGPYFTPPTKIKTKIKD.....SETPSITQARGSMFLAEHVV 360 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283308 seqs, 96168682 residues Searched:

283308 Total number of hits satisfying chosen parameters:

Minimum DB seg length: 0 Maximum DB seg length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR 76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	G protein-coupled	alpha-thrombin rec	thrombin receptor		thrombin receptor	P2Y6 receptor - hu	G protein-coupled	chemokine (C-C) re	G protein-coupled	G protein-coupled	ATP receptor P2u -		chemokine (C-C) re	interleukin-8 rece	ເດ	probable chemoattr	interferon-inducib	interleukin-8 rece	interleukin-8 rece	G protein-coupled	interleukin-8 rece	heptahelical P2Y5-	G protein-coupled	probable G protein	7	9		Ω.	interlenkin-8 rede
SUMMAKIES	ID	B45680	S17148	ဌ	434	10	\circ	JC5067	10	6,	5	A47556	A39714	A45177	A53611	I38435	JC5796	TH	ıΛ	A48921	E #1	~	JC5549		S40685	0950	4	50	493	3944
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	Length	361	427	425	432	420	328	355	360	371	328	373	362	355	360	380	371	367	358	359	308	355	370	362	395	344	375	428	359	350
	% Query Match	33.7	19.4	18.1	18.1	17.7		17.3		16.8	16.4	vo	16.4	16.4	16.3	16.1	9	ů.	ď.	15.9	'n.			'n.	15.6	15.5		15.5	15.4	15.3
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chemokine (C-C) re	chemokine (C-C) re	probable G protein	somatostatin recep	delta opioid recep	MIP-1 alpha recept	G protein-coupled	G protein-coupled	adrenomedullin rec	somatostatín recep	P2Y receptor - bov	proteinase-activat	angiotensin II rec	G protein-coupled	mu opioid receptor	G protein-coupled
JC4587	G02436	I58186	A44021	138532	I49340	JC4737	B57641	JC5784	JC2083	JC4162	866518	S44425	S68207	A57510	153033
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15.3 360 2	15.2 355 2	1 354	428	372	356	373	.9 362	.9 404	.8 369	.8 373	.8 397	.8 359	-	.7 398	14.6 354
286.5 15.3 360 2	5 15.2	15.1 354	4 15.1 428	3 15.1 372	2 15.0 356	1 15.0 373	362	14.9 404	5 14.8 369	.8 373	8 14.8 397	.8 359	14.7 362	.7 398	14.6

ALIGNMENTS

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	upled			
- [표	first lymphocyte-specific G protein-coupled PMID:8383238 PIDN:AAA35924.1; PID:g292057 ne (NCBIN:127096, NCBIP:127097)	; Length 361; ; Indels 7; Gaps 4; ALLVFSALGNILALCLTCQKSR 60 ::: : : : LVFIIGLVGNLIALVVIVQNRK 61	GKGLCRLTAFVLYTDTYGGVYL 120	TWKLCSTAREDPVTSRKGRHWR 240
	irus-induced genes: 680; MUID:93188173; c acid L08177; NID:g292056; B-Mymbhooytes ted from NCBI backbo ptor P2u oupled receptor; tra	imilarity 37.8%; Score 632.5; DB 2; Length 361; ; Conservative 74; Mismatches 141; Indels 7; Gaps IKLGPYFTPPTXI.*YTKIXDLAVESQTVXIFLRSLFYTALLVFSALGNILALCLTCQKSR :: : : : : : : : :	KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYL	MEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR
ipled F omo sap ep-1993 B45680 M.; J	cein-Ba number: B45680 blimina Ppe: nu -361 < ences: cences: 11 sour snce ex	വ സ		:
SULT 1 5580 protein-coupled Species: Homo se Date: 21-Sep-195 Accession: B456 Birkenbach, V100;	ence r sion: sion: sion: sine ty lues: lues: limenta seque family	Participation of the control of the	61 62 121 122	181 182 242 242 302 302
RESULT 1 B45680 G protein-coupled pe C,Species: Homo sapi C,Date: 21-Sep-1993 C,Accession: B45880 R,Birkenbach, M., JC	A,Title: Epstein-Barr vir A,Reference number: A4566 A,Accession: Bush680 A,Status: preliminary A,Moteoule type: nucleic A,Residues: 1.361 kBIR> A,Cross-references: GB:LC A,Reperimental source: B A,Note: sequence extracte C,Superfamily: ATP recept C,Keywords: G protein-cou	Query Ma Best Loc Matches Qy	\$ 8 8 8	6 6 6 6 6

RESULT 2 S17148 alpha-thrombin receptor - Chinese hamster

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C.Species: Rattus norregicus (Norway rat)
C.Species: Rattus norregicus (Norway rat)
C.Date: 04-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 05-Nov-1999
C.Accession: A4348
C.Accession: A4348
C.Accession: A4348
M.S. End. Chem. 267, 16975-16979, 1992
J. Biol. Chem. 267, 16975-16979, 1992
J. Biol. Chem. 267, 16975-16979, 1992
J. Biol. Chem. 267, 16975-16979, 1992
J. Sichita and J. Special and Comman of the rat vascular smooth muscle thrombin receptor. Evidence A; Reference number: A43448
M.Sterence number: A43448
A; Residue: Preliminary
A, Molecule type: MRNA
A; Residues: 1-432 < ZHO>
A; Molecule type: MRNA
A; Residues: 1-432 < ZHO>
A; Molecule type: MRNA
A; Residues: Cells
A; Residues: Cells
A; Reservances: GB M81642; MID: G207465; PIDN: AAA42274.1; PID: G207466
A; Experimental source: RASM aortic smooth muscle cells
A; Note: sequence extracted from NCBI backbone (NCBIN:111974)
C; Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      314 KKSRALFLSAAVFCIFIVCFGPTNVLL---IVHYLLLSDSPGTETAYFAYLLCVCVTSVA 370
                                                                                                                                                   GRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLM-----VLV 198
                                                                                                                                                                                                    PYHLINIKQFMARGMLHLPSCAERRAFILLSLQATVALMNNNCGITPIIYFFASTHYRKWLL 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       328 P--TNVLLIAHYSFLSHTSTTEAAYFAXLL--CVCVSSISSCIDPLIYYYASSECQRYVY 383
GRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTA 144
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                                                 199 AF-AIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18.1%; Score 339; DB 2; Length 43%
29.0%; Pred. No. 4.1e-22;
tive 61; Mismatches 153; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SC-IDPLIYYYASSECQRHLYSILCCRESSDSNSCNST 407
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   384 SILCCKESSDPSSYNSSGQLMASKMDTCSSNLNNSIY 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      318 GILKLKGSSSSSSSSSTPGKASSETPSITQARGSMF 354
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C;Species: Xenopus laevis (African clawed frog)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 29.04
Matches 98; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                thrombin receptor - rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 237
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C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Accession: A37912
R;Vu, T.K.H.; Hung, D.T.; Wheaton, V.I.; Coughlin, S.R.
Cell 64, 1057-1068, 1991
A;Title: Molecular cloning of a functional thrombin receptor reveals a novel proteolytic A;Reference number: A37912; MUID:91168254; PMID:1672265
A;Reference number: A37912, MUID:9139676; PIDN:AAA36743.1; PID:9339677
A;Residues: 1-425 < VUA>
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C;Species: Cricetulus griseus (Chinese hamster)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 05-Nov-1999
C;Accession: S1748
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100 SPWLRLFIPSV-YTFVFVVSLPLNILAIAVFVLKMKVKKPAVVYMLHLAMADVLFVSVLP 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTA 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GRARLVCVAIWTLVLLQTMPLLLIMPMTK--PLVGKLACMEYSSMESVLGLPLMVLVAF-A 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHL 261
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2; Length 427;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19.4%; Score 364.5; DB 2; Length 30.7%; Pred. No. 2.3e-24; cive 58; Mismatches 146; Indels
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llarity 29.1%; Pred. No. 3.7e-22;
Conservative 58; Mismatches 160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            thrombin receptor precursor - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           390 CKESSDPNSYNST 402
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Best Local Similarity
Matches 98; Conserv
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nes 96; Conserv
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G protein-coupled receptor CKR-L1 - human
N.Alternate names: Chemokine receptor-like protein TER1; GPR-CY6
S.Accession: Sapiens (man)
C.Accession: JCS067; G0276; G02387
C.Accession: JCS067; G02776; G02387
C.Accession: JCS067; G02776; G02387
C.Accession: JCS067; G02776; G02387
C.Accession: JCS067; G027776; G02387
C.Accession: JCS067; MUD:97040707; PMID:8886020
A.Title: Molecular cloning and RNA expression of two new human chemokine receptor-like standerne number: JCS067; MUD:97040707; PMID:8886020
A.Mesidue type: DNA
A.Molecule type: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                          70 VHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHY 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAVVCAHWGPRLRTAGR--ARLVCVALWTLVTLQTMPLLLMPMTKPLVGKLACMEYS--- 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     126 LG-ICHPLAPWHKRGGRRAAWLVCVAVWLAVTTQCLPTAIFAATGIQRNRTVCYDLSPPA 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               185 --SMESVLGLPLMVLVAFAIGFCGFVGIILSCYMKITWKLCSTARED----PVT-SRKGR 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              185 LATHYMPYGMALTV----IGFLLPFAALLACYCLLACRLC---RODGPAEPVAOERRGK 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                238 HWRGCLLTLLMLVAVVVCFSPYHLNIKQFMA-RGMLHLPSCAERRAFLLSLQATVALMNM 296
                                                                                                                                                                                                                                                                                                                                                    14 PPTTC-----VYRENFKQLLLPPVXSAVLAAGLPLNICVITQICTSRRALTRTAVYT 65
                                                                                                                                                                                                                                                                                                 10 PPTKIKTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYL 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cross-references: EMBL:U45983; NID:g1245056; PID:g1245057; Comment: This protein belongs to the family of beta chemokine receptors: Genetics:
   F;241-264/Domain: transmembrane #status predicted <TWM6>
F;283-305/Domain: transmembrane #status predicted <TWM7>
F;5,173/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                               34,
                                                                                                                                                    17.5%; Score 329; DB 2; Length 32
28.0%; Pred. No. 2.4e-21;
ive 54; Mismatches 141; Indels
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C;Superfamily: vertebrate rhodopsin
C;Keywords: G protein-coupled receptor; transmembrane protein
F;3c-63/Domain: transmembrane #status predicted <TM1>
F;73-94/Domain: transmembrane #status predicted <TM2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A)Status: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-355 <NAP>
A;Cross-references: EMBL:U62556; NID:g1468978; PID:g1468979
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A;Accession: G02387
A;Status: preliminary: translated from GB/EMBL/DDBJ
A;Roldcule type: DNA
A;Residues: 1-355 <BON>
A;Cross-references: EMBL:U45983; NID:g1245056; PID:gC;Comment: This protein belongs to the family of bet
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R;Bonner. T.I.
submitted to the EMBL Data Library, January 1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                293 NSVLDPILFYFTQKKFRR 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297 NCGITPIIYFFASTHYRK 314
                                                                                                                                                                                           l Similarity 28.09
89; Conservative
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Best Local
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C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000
C;Accession: 151667
R;Gerszten, R.E.; Chen, J.; Ishii, M.; Ishii, K.; Nanevicz, T.; Turck, C.W.; Vu, T.H.; C
Nature 368, 648-651, 1994
A;Title: Thrombin receptor's specificity for agonist peptide is determined by its extract
A;Reference number: 151667; MUID:94195429; PMID:8145852
A;Accession: 151667
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Residues: mRNA
A;Residues: 1-420 cGER>
A;Cross-references: EMBL:U09632; NID:g495197; PIDN:AAA18498.1; PID:g495198
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TKEAEQYLSSQWLTKFVPSL-YTVVFIVGLPLNLLAIIIFLFKMKVRKPAVVYMLNLAIA 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DILFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCA 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPWTKPLVGKLACMEYSSMESVLGLPLM 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               207 MHSLSWRTMSRAYMACSFIWLISIASTIPLLVTEQTQ----KIPRLDITTCHDVLDLKDL 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             --VLVAFAIGFC-----GPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLM 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                263 KDFYIYYFSSFCLLFFFVPFIITTICYIGIIRSLSSSSIENSC-----KKTRALFLALFLAVVV 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVAVVVCFSPYHLNIKOFMARGMLHLPSCAERRAFLLSLQATVALMMNVCGITPIIYFFA 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LCVFIICFGPTNV---LFLTH---YLQEANBFLYFAYILSACVG--SVSCCLDPLIYYYA 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75
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A;Status: preliminary, translated from GB/EMBL/DDBJ
A;Nolecule type: mRNA
A;Rosidues: 'M',4-328 <HAM>
A;Cross-references: EMBL:US2464; NID:g1407632; PIDN:AAB03572.1; PID:g1407633
A;Gnetics:
A;Gene: P2Y6
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C;Species: Homo sapiens (man)
C;Date: 15-Oct-1995 #sequence_revision 16-Aug-1996 #text_change 17-Nov-2000
C;Date: 15-Oct-1995 #sequence_revision 16-Aug-1996 #text_change 17-Nov-2000
C;Accession: JC4800; Gibernaems, J.M.
Biochem. Biophys. Res. Commun. 222, 303-308, 1996
A;Title: Cloning, functional expression and tissue distribution of the human A;Reference number: JC4800; MJD:96222498; PMID:8670200
A;Accession: JC4800
A;Accession: JC4800
A;Accession: JC4800
A;Accession: JC4800
A;Accession: JC4800
A;Accession: JC4800
A;Accession: JC4800
A;Cross-references: EMBL:X97058
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K-Hammer, F.; Southey, M.C.; Somers, G.R.; Hutchins, A.M.; Venter,
submitted to the EMBL Data Library, March 1996
A; Reference number: H01373
                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 2; Length 420;
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                                                                                                                                                                                                                                                                                                                                                                                                                                              17.7%; Score 332.5; DB 2; Length 26.6%; Pred. No. 1.5e-21; ive 74; Mismatches 155; Indels
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Best Local Similarity 26.6*
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9
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                                                                                                                 146
                                                                                                                                                                                           206
                                                                                                                                                                                                                                                                                                                                                  LNIKQFMAR--GMLHLPSCAERRAFLLSLQATVALMNMNCGITPIIYFFASTHYRKWLL- 317
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                                                                          96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G protein-coupled receptor DEZ - mouse
C,Species: Mus musculus (house mouse)
C,Date: 07-Jul-1997 #sequence_revision 29-Aug-1997 #text_change 19-May-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IIITFFLCWCPYHTLYLLE-----LHHTAVPS----SVFSLGLPLATAVALANSCMNPI
                                                                                                                                                                                                                      GUITSLATWSVAVFASLPGFLFSTCYTERNHTYCKTKYSLNSTTWKVLSSLEINILGLVI
                                                                                                                                                                                                                                                                                                                                                                         259 -NIVLFLETLVELEVLQDCTFERYLDYAIQATETLAFVHCCLNPIIYFFLGEKRRXYILQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CyAccession: JC5498
Rymethner, A.; Hermey, G.; Schinke, B.; Hermans-Borgmeyer, I.
Blochem. Biophys. Res. Commun. 233, 336-342, 1997
A;Title: A novel G protein-coupled receptor with homology to neuropeptide a protein number: JC5498; MUID:97289630; PMID:9144535
A;Contents: Brain
A;Accession: JC5498
A;Rolecule type: MRNA
A;Residues: 1-371 <MRNA
A;Residues: 1-371 <MRNA
A;Coss-references: GB:U79525; NID:91722346; PIDN:AAB53789.1; PID:91732347
C;Comment: This protein is involved in the bone metabolism.
F;110-187/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | | : | | : | : | : | | | | | : | EAKVAPVFL-VVIYSLVCFLGLLGNGLVIVIATFKMKKTVNT-VWFVNLAVADFLENIFL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGR
                                                                                                                                        ---YYAADQWVFGLGLCKMISWMYLVGFYSGIFFVMLMSIDRYLAIVHAVFSLARARTLTY
                                                                                                                                                                                           147 ARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLMVLVAFAIGFCG
                                                                                                                                                                                                                                                                        PVGIILSCYMKI--TWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCF----SPYH
                                                                                                                                                                                                                                                                                                             214 PLGIMLFCYSMIIRTLOHCKNEKKNKAVK--------MIFAVVVLFLGFWTPY-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24 ESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRT
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                                                             -----LMVLVAFAIGFCGFVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLL
  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41;
  47;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144 AGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLP
                                         KIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSD)
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    Indels
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16.8%; Score 315.5; DB 2;
Best Local Similarity 25.4%; Pred. No. 4.1e-20;
Matches 89; Conservative 67; Mismatches 154;
  131;
    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                       LFKTCRGLFVLCQYCGLLQIYSADTPSSS 346
                                                                                                                                                                                                                                                                                                                                                                                                                               ---GILKLKGSSSSSSS 331
    58;
    Conservative
    93;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           204 ILGLIPFTIFMFCYIKILHQLKRCQNHNKT------KAIRLVLIVVIASLLFWVP 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YHLNIKQFMARGMLHLPSCAERRAFLLSLQATVALMNMNCGITPIIYFFASTHYRKWL-- 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FNVVLFLTSLHSMHILDGCSISQQLTYATHVTEIISFTHCCVNPVIYAFVGEKFKKHLSE 313
                                                                                                                                                                                                                                                                            143
                                                                                                                                                                                                                                                                                                                                                        144 AGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLMVLVAFAIG 203
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                                                                                                                                                                                                                                                                                                   FCG-4-PVGILLSCYMKITWKL--CSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSP
                                                                                                                                                                                                                                                                                PGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRT
                                                                                                                                                                                                  QTVKIFLRSLFYTALLVFSALGN--ILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A. Martin Mary 160
A. Martin Mary Compared with conceptual translation
A. Molecule type: mRNA
A. Residues: 1-360 < POW
A. A. Cross-references: GB: 885740; NID: 91370103; PIDN: CAAS9743.1; PID: 9971452
C. Genetics:
                                                                                                                                                              Gaps
                                                                                                                                                            38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ispecies: Homo sapiens (man)
Abate: 10-Nov-1995 #text_change 21-, Abate: 10-Nov-1995 #text_change 21-, Accession: A57160
Power, C.A.; Meyer, A.; Nemeth, K.; Bacon, K.B.; Hoogewerf, A.J.; Biol. Chem. 270, 19495-19500, 1995
Abiol. Chem. 270, 19495-19500, 1995
Abiolecular cloning and functional expression of a novel CC, Acference number: A57160; MUID:95370289; PMID:7642634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 360;
                                                                                                                       Length 355;
                                                                                                                       17.3%; Score 324; DB 2; Length 35:
26.4%; Pred. No. 7.1e-21;
ive 65; Mismatches 145; Indels
        transmembrane #status predicted <TM3>
transmembrane #status predicted <TM4+
transmembrane #status predicted <TM5+
transmembrane #status predicted <TM6-
transmembrane #status predicted <TM6-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 322.5; DB 2;
Pred. No. 9.7e-21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chemokine (C-C) receptor 4 - human Ciperokine (C-C) receptor 4 - human Cipercies: Homo sapiens (man) Cipate: 10-Nov-1995 #sequence_revisio C; Accession: A57160
R; Power, C.A.; Meyer, A.; Nemeth, K.; J. Biol. Chem. 270, 19495-19500, 1995
A; Title: Molecular cloning and functifiable ference number: A57160; MUID:9537A; Accession: A57160
A; Scrius: preliminary; not compared w
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28.3%;
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Best Local Similarity 26.4
Matches 89; Conservative
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Best Local Similarity
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        F;108-129/Domain: t:
F;147-171/Domain: t:
F;200-222/Domain: t:
F;239-260/Domain: t:
F;281-304/Domain: t:
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Gene: GDB:CMKBR4
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A;Accession: A39714
A;Accession: A39714
A;Betaus: nucleic acid sequence not shown
A;Betaule: nucleic acid
A;Accule type: mRNA
A;Residues: 1-362 <SRE>
A;Cross-references: GB:M64749; NID:g292418; PID:g292419
C;Comment: The authors have revised the name and functional description of this protein
C;Superfamily: vertebrate rhodopsin
C;Reywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              G protein-coupled receptor RDC1 - human
C;Species: Homo sapiens (man)
C;Aacession: A39714
R;Sreedharan, S.P; Robichon, A.; Peterson, K.E.; Goetzl, E.J.
Proc. Natl. Acad. Sci. U.S.A. 88, 4986-4990, 1991
A;Title: Cloning and expression of the human vascactive intestinal peptide receptor.
A;Reference number: A39714; MUID:91271317; PMID:1675791
                                                                                                                                                             141 LRTAGRARLVCVAIWTLVLLQTMPLLLMPWTKPLVGKLACMEYSSMESVLGLPLMVLVAF 200
                                                                                                                                                                                                                                                                                                           |: | | | | | | : : | | | | 320
262 HVTRTLYYSFRSLDL-SCHTLNAINMAYKITRPLASANSCLDPVLYFLAGGRLVRFARDA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82 ALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRL 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         213 ELVSVVLGFAVPFSIIAVFYFLLARAISASSDQEKHSSRK-----IIFSYVVVFLVC 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FSPYHLNIKQFMARGMLHLP-SCAERRAFLLSLQATVALMNMNCGITPIIYFFASTHYRK 314
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                                                                                       88 LLVYYYARGDHWPFSTVLCKLVRFLFYTNLYCSILFLTCISVHRCLGVLRPLHSLRWG--
28 NEDFKYVLLPVSYGVVCVLGLCLNVVALYIFLCRLKTWNASTTYMFHLAVSDSLYAASLP
                                                 85 GRUVCYVIGSSWPFGKGLCRITAFVLYIDTYGGVYLMACVSVDHYPAVV----CAHWGPR
                                                                                                                                                                                                                 146 --RARYARRVAAVVWVLVLACQAPVLYFVTTSVRGTRITCHDTSARELFSHFVAYSSVML
                                                                                                                                                                                                                                                                     201 AIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAV-VVCFSPY
                                                                                                                                                                                                                                                                                                                                                                                 260 HLNIKOFMARGMLHLPSCAERRAFLLSLQATVALMNMNCGITPIIYFFASTHYRKWL---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36 TIPVWVVSLVQHNQWPMGELICKVTHLIFSINLFSGIFFLICMSVDRYLSITYFTNTPSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22 NVESOTVKIFLRSLFYTALLVFSALGNILALCITCOKSRKINCTGIYLVHLAVSDLLFTV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RTAGRARLVCVAIWTLVLLQTMP--LLLMPMTKPLVGKLACM----EYSSMESVLGLPLM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             --LGILK-----LKGSSSSSSSSSSTPGKASSETPSI 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              321 KPPTEPTPSPQARRKLGLHRPNRTVRKDLSVSSDDSRRTESTP--AGSBTKDI 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 16.4%; Score 307.5; DB 2; Length 362; Best Local Similarity 24.2%; Pred. No. 2e-19; Matches 80; Conservative 74; Mismatches 148; Indels 29
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                                                                                 Distriction coupled P2 receptor - rat
C;Species: Rattus norvegicus (Norway rat)
C;Decies: Rattus norvegicus (Norway rat)
C;Decies: 02-011-1996 #sequence_revision 02-011-1996 #text_change 19-May-2000
C;Accession: 155450
R;Chang, K.; Hanaoka, K.; Kumada, M.; Takuwa, Y.
U. Biol. Chem. 270, 26152-26189, 1995
A;Title: Molecular cloning and functional analysis of a novel P2 nucleotide receptor. A;Reference number: 155450; MUID:96044682; PMID:7592819
A;Reference number: 155450; MUID:96044682; PMID:7592819
A;Reference number: 155450; MUID:9604682; PMID:7592819
A;Reference: newA
A;Reference: newA
A;References: GB:D63665; NID:g1066007; PIDN:BAA09816.1; PID:g1066008
C;Superfamily: ATP receptor P2u
C;Reywords: G protein-coupled receptor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          70 VHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYIDTYGGVYLMACVSVDHY 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAVVCAHWGPRIRTAGR - - ARLVCVAIWTLVILQTMPLLIMPMTKPLVGKLACMEYS - SM 186
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATP receptor P2u - mouse
C/Species: Mus musculus (house mouse)
C/Species: Mus musculus (house mouse)
C/Species: Musculus (house mouse)
C/Accession: A47556
R/Lustig, K.D.; Shiau, A.K.; Brake, A.J.; Julius, D.
Proc. Natl. Acad. Sci. U.S.A. 90, 5113-5117, 1993
A/Title: Expression cloning of an ATP receptor from mouse neuroblastoma cells, A/Reference number: A47556; MUID:93281707; PMID:7685114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10 PPTKIKTKIKDLNVESOTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTARED----PVTSRKGRHWRGC
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A,Molecule type: m2NA
A,Redidues: 1-73 <LUSA
A,Residues: 1-73 <LUSA
A,Cross-references: GB:L14751; NID:g309457; PIDN:AAA39871.1; PID:g309458
C;Superfamily: ATP receptor P2u
C;Keywords: transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 328;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
16.4%; Score 308; DB 2; Length 32
Best Local Similarity 25.6%; Pred. No. 1.7e-19;
Matches 80; Conservative 58; Mismatches 152; Indels
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|ILFYFTQQKFRR 310
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SQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALP

16.4%; Score 308; DB 2; Length 373; .larity 27.2%; Pred. No. 1.9e-19; Conservative 53; Mismatches 164; Indels

Query Match Best Local Similarity Matches 96; Conserv

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nterleukin-8 receptor type B - human
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   chemokine (C-C) receptor 1 - human
N;Alternate names: C-C CKR-1; macrophage inflammatory protein-1-alpha receptor
C;Specias: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence revision 30-Sep-1993 #text_change 13-Aug-1999
C;Accession: A45177; I55671
C;Accession: A45177; I55671
C;Accession: A45177; I55671
A;Ribecte, K.; Didregorio, D.; Mak, J.X.; Horuk, R.; Schall, T.J.
A;Title: Molecular cloning, functional expression, and signaling characteristics of a CA;Reference number: A45177; MUID:93161416; PMID:7679328
A;Atclession: A45177
A;Actular acid sequence not shown
A;Molecule rype: mRNA
A;Anolecule rype: mRNA
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C; Superfamily: vertebrate rhodopsin

C; Superfamily: vertebrate rhodopsin

C; Superfamily: vertebrate rhodopsin

C; Superfamily: vertebrate rhodopsin

F; Se-60/Domain: transmembrane #status predicted <TM1>
F; Se-60/Domain: transmembrane #status predicted <TM3>
F; Se-10/Domain: transmembrane #status predicted <TM3>
F; Se-231/Domain: transmembrane #status predicted <TM3>
F; Se-231/Domain: transmembrane #status predicted <TM3>
F; Se-231/Domain: transmembrane #status predicted <TM5>
F; Se-231/Domain: transmembrane #status predicted <TM5>
F; Se-305/Domain: transmembrane #status predicted <TM6>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37 YTALLVESALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSW
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Experimental source: HL60 cells
Note: sequence extracted from NCBI backbone (NCBIP:124876)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Status: preliminary; translated from GB/EMBL/DDBJ
|Molecule type: mRNA
|Residues: 1-355 <RES>
|Cross_references: GB:L10918; NID:g292416; PIDN:AAA36543.1; PID:g292417
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A,Cross-references: GDB:138446; OMIM:601159
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332 SVDRLERVSSTSPST 346
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R;Gao, J.
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A;Status: preliminary
A;Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Accession: 1360, CRES>
A;Accession: 138712
A;Accession: 138712
A;Accession: 138712
A;Accession: preliminary
A;Accession: preliminary
A;Cross-references: EMBL:U11872; NID:g511808; PIDN:AAA64380.1; PID:g511809; EMBL:U11873;
A;Cross-references: EMBL:U11872; NID:g511808; PIDN:G511818; PID:g511819; EMBL:U11873;
A;Cross-references: EMBL:U11877; NID:g511818; PID:g511819; EMBL:U11873;
A;Sprenger, H.; Lloyd, A.R.; Lautens, L.L.; Bonner, T.I.; Kelvin, D.J.
B;Cl. Chem. 269; 11065-11072, 1994
A;Title: Structure, genomic organization, and expression of the human interleukin-8 recells. A;Reference number: A53611; MUID:94209273; PMID:7512557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA,
Msesidues: 6-360 cSPR-
A; Residues: 6-360 cSPR-
A; Cross-references: GB: M99412; GB: L19593
R; Murphy, P. M.; Tiffany, H.L.
Science 2:33, 1280-1283, 1991
A; Title: Cloning of complementary DNA encoding a functional human interleukin-8 receptor
A; Reference number: A39446; MUID: 91368200; PMID: 1891716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A.Residues: 6-360 <MUR>
A.Cross-references: GB:M73969
C.Comment: This receptor, unlike IL8RA, binds several peptides besides interleukin-8, in
C;Species: Homo sapiens (man)
C;Date: 07-Oct-1994 #sequence_revision 12-Apr-1996 #text_change 05-Nov-1999
C;Accession: 137898; 138712; A53611; A33446
C;Accession: 137898; L38712; A53611; A33446
J;Ahuja, S.K.; Shetty, A., Tiffenny, H.L.; Murphy, P.M.
J; Biol. Chem. 269, 26381-26389, 1994
A;Title: Comparison of the genomic organization and promoter function for human interleul
A;Reference number: 137898; MUID:95014476; PMID:7929358
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Best Local Similarity 28.0%; Pred. No. 2.5e-19;
Matches 94; Conservative 61; Mismatches 144; Indels 37;
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A;Map position: 2435-2435
C;Superfamily: vertebrate rhodopsin
C;Keywords: G protein-coupled receptor; transmembrane protein
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Search completed: February 19, 2004, 19:34:56 Job time : 22 Becs

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February 19, 2004, 19:18:00; Search time 17 Seconds (without alignments) 995.860 Million cell updates/sec
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                 OM protein - protein search, using sw model
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US-10-041-615-34 1876 1 MIKLGPYFTPPTKIKTKIKD.....SETPSITQARGSMFLAEHVV 360 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

127863 seqs, 47026705 residues Searched: Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100%. Listing first 45 summaries

SwissProt_41:* Database : Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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SUMMARIES	ΠD	EBI2 HUMAN	GP17 HUMAN	PAR1 CRILO	PAR1_PAPHA	PAR1_MOUSE		V206 FOWPV	PAR1_RAT	PAR1_XENLA	P2Y8 XENLA	P2Y6 HUMAN	CKR8_MOUSE	CKR8_HUMAN	CLT1_PIG	CKR4_HUMAN	CLT1_HUMAN	CLT1_RAT	CKR1 MACMU	FK79 HUMAN	CLT1_MOUSE	CML1_HUMAN	CML1 MOUSE	P2Y6_RAT	CLT2_PIG	P2Y2 MOUSE	IL8B_PANTR	RDC1_HUMAN		CKR1 HUMAN			IL8B MACMU	CCR3_MOUSE
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ALIGNMENTS

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Blaesius R.H., Weber R.G., Lichter P., Ogilvie A.;
Blaesius R.H., Weber R.G., Lichter P., Ogilvie A.;
Movel orphan G protein-coupled receptor primarily expressed in the single of protein chromosomal band 2q21.";
J. Neurochem. 70:1357-1365(1998).
-:- FUNCTION: Putative receptor for purines coupled to G-proteins
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
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MEDLINE=96145150; PubMed=8558062;
Raport C.J., Schweickart V.L., Chantry D., Eddy R.L. Jr.,
Godiska R., Gray P.W.;
"New members of the chemokine receptor gene family.";
J. Leukoc. Biol. 59:18-23(1996).
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GB17 GB17 (20UZG; GUTEZ1;
G133G4; Q9UDZG; GUTEZ1;
G1-NOV-1997 (Rel. 35, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Frobable P2Y purinoceptor GPR17 (P2Y-like receptor) (R12).
                                                                                                                                     CYTOPLASMIC (POTENTIAL).
INTERACTION WITH G PROTEINS.
BY SMILARITY.
                                                                                                                                                                                                                                                                                                                                              74; Mismatches 141; Indels
                                                                                           6 (POTENTIAL).
EXTRACELLULAR (POTENTIAL)
7 (POTENTIAL).
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4 (POTENTIAL).
EXTRACELLULAR (POTENTIAL)
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CYTOPLASMIC (POTENTIAL).
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Pred. No. 5.3e-38;
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TISSUE-Hippocampus;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MIM; 603071; -.
GO: GO:0005887; C:integral to plasma membrane; TAS.
GO: go:0004950; F:chemokine receptor activity; TAS.
GO; GO:0007186; P:chemokine receptor protein signalin. ..; GIITEPPRO; IPR000276; GPCR_Rhodpsn.
Pfam; PF00001; 7tm_1; 1.
                                                                                               ISOIG=013304-2; Sequence=VSP 001987; ISSUE SPECIFICITY: PRIMARILY EXPRESSED IN BRAIN. SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-LINKED (GLCNAC. .) (POTENTIAL)
N-LINKED (GLCNAC. .) (POTENTIAL)
N-LINKED (GLCNAC. .) (POTENTIAL)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57; Mismatches 142; Indels
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PROSITE; PS00237; GPROTEIN RECEP F1 1; 1.
PROSITE; PSS0262; G_PROTEIN_RECEP_F1_2; 1.
G-protein coupled receptor; Transmembrane; Glycoprotein; Alternative splicing.
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EXTRACELLULAR (POTENTIAL) .
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FTIG=VSP 001987.
132FBE97BE83C60C CRC64;
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EXTRACELLULAR (POTENTIAL)
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CYTOPLASMIC (POTENTIAL).
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6 (POTENTIAL).
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CYTOPLASMIC (POTENTIAL)
Event=Alternative splicing; Named isoforms=2;
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                                                  Isoid=Q13304-1; Sequence=Displayed
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EMBL; X12546; CAA73144.1; -.
EMBL; Z94154; CAB08107.1; -.
EMBL; Z94155; CAB08108.1; -.
HSSP; P34996; 1DDD.
Genew; HGNC:4471; GPR17.
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275 PSCAERRAFLLSLQATVALMMNCGITPIIYFFASTHYRKWLLGIL---KLKG---SSSS 328
                                                      295 ASCATQRILALANRITSCLTSLNGALDPIMYFFVAEKFRHALCNLLCGKRLKGPPPSFEG 354
                                                                                                                                                                                  PARI_CRILO STANDARD; PRT; 428 AA.
Q00951, G6461;
Q01-287-1993 (Rel. 25, Created)
01-APR-1997 (Rel. 35, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Proteinase activated receptor 1 precursor (PAR-1) (Thrombin receptor)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLING=96028007; PubMed=7488069;
Hartmann T. Grace M.B., Buzard G.S., Ruoss S.J.;
Hartmann T., Grace M.B., Buzard G.S., Ruoss S.J.;
Hirtmann T., Grace M.B., Buzard G.S., Ruoss B.J.;
Biochem. Biophys. Res. Commun. 215:974-980(1995).
-!- FUNCTION: High affinity receptor for activated thrombin coupled G proceins that stimulate phosphoinositide hydrolysis.
-!- FUM. A proteolytic cleavage generates a new amino terminus that functions as a tethered ligand.
-!- SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                                                                                                                  F2R OR PAR1. Chinese hamster) (Chinese hamster). Caricetulus longicaudatus (Long-tailed hamster). Eukarycta, Metazca, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Cricetinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                       "CDNA cloning and expression of a hamster alpha-thrombin receptor coupled to Ca2+ mobilization."; FEBS Lett. 288:123-128(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; 1900

InterPro; IPR000276; GPCR_Rhodpsn.

Primrs; Pr00001; 7tm 1; 1.

PRINTS; PR00237; GPCRRHODPSN.

PROSITE; PS00237; GPROTEIN RECEP F1 1; 1.

PROSITE; PS00262; GPROTEIN_RECEP_F1 2; 1.

G-protein coupled receptor; Transmembrane; Glycoprotein; Signal;

Blood coagulation; Polymorphism.
                                                                                                                                                                                                                                                                                                                                                                         TISSUB=Lung;
MEDINE=21348247; PubMed=1652467;
MESUNE=21348247; PubMed=1652467;
MESSEN U.B., Vouret-Craviari V., Jallat S., Schlesinger Y., Pages G., Pavirani A., Lecocq J.P., Pouyssegur J.,
Obberghen-Schilling E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REMOVED FOR RECEPTOR ACTIVATION SIMILARITY).
PROTEINASE ACTIVATED RECEPTOR 1.
EXTRACELLULAR. (FOTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; X61958; CAA43957.1; -.
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HSSP; P34996; 1DDD.
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                                                                                          329 SSSSSSTPGKA 339
                                                                                                                   KTNESSLSAKS 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     428
105
131
                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10030;
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42
106
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PARI PAPHA

ID PARI PAPHA

R P5488;

DT 15-JUL-1998 (Rel. 36, Created)

DT 15-JUL-1998 (Rel. 36, Last sequence update)

DT 28-FBS-2003 (Rel. 41, Last annotation update)

DT 28-FBS-2003 (Rel. 41, Last annotation update)

DF POTABLASS activated receptor 1 precursor (PAR-1) (Thrombin receptor).

DS Protainase activated receptor 1 precursor (PAR-1) (Thrombin receptor).

R P2R OR PARI OR BHRA12.

OS Papio hamadras baboon).

OC Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Butheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254 ITTCHDVLNETLLQGFYSYYFSAFFAVFLVPLIISTICYMSIIRCLSSSS-----VANR 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   309 SKKSRALFLSAAVFCVFIVCFGP--TNVLLIMHYLLLSDSPATERAYFAYLL--CVCVSS 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59 SRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGV 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              119 YLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVTLQTMPLLLLMPMTK--PLVG 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           177 KLACMEYSSMESVLGLPLMVLVAF-AIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRK 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      236 GRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFWARGMLHLPSCAERRAFLLSLQATVALMN 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shoji M., Hayzer D.J., Hanson S.R.;
Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: High affinity receptor for activated thrombin coupled to
                                                                                                                                                                                                                                                                                       CLEAVAGE (BY THROMBIN) (BY SIMILARITY).
BY SIMILARITY.
N-LINKED (GLCNAC. . .) (POTENTIAL).
N-LINKED (GLCNAC. . .) (POTENTIAL).
N-LINKED (GLCNAC. . .) (POTENTIAL).
N-LINKED (GLCNAC. . .) (POTENTIAL).
H-SINKED (GLCNAC. . .) (POTENTIAL).
H-SINKED (IN AN ALLELE).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 428;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19.6%; Score 367; DB 1; Length 428, 30.1%; Pred. No. 3.6e-19; ive 63; Mismatches 158; Indels
                                                                                                      4 (FOIENTIAL).
EXTRACELLULAR (POTENTIAL).
                                                                                                                                                                        6 (POTENTIAL).
EXTRACELLULAR (POTENTIAL).
                    2 (POTENTIAL).
EXTRACELULAR (POTENTIAL)
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E5492AB2CD877E2F CRC64;
                                                                                                                                                      (POTENTIAL).
                                                                (POTENTIAL).
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(POTENTIAL)
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                                                                                               (POTENTIAL)
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384
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CARBOHYD
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Mus musculus (Mouse)
                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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                                                                                                                                                                                                        NCBI_TaxID=10090;
                                                                                                                                                                                                                                             SSUE=Brain;
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                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the FNBL outstation the Buropean Bioinformatics Institute. There are cretrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          85 GRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTA 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              157 FKISYYLSGSDWQFGSELCRFVTAAFYCNMYASILLMTVISIDRFLAVVYPMQSLSWRTL 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  145 GRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLM-----VLV 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199 AF-AIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFS 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           217 GRASFICLAIWALAIAGVVPLLLKEQTIQVPG----INITICHDVLNETLLEGYYAYYFS 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         258 PYHLNIKQFMARGMLHLPSCAERRAFLLSLQATVALMNMNCGITPIIYFFASTHYRKWLL 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 SQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALP 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19.1%; Score 358.5; DB 1; Length 425;
30.0%; Pred. No. 1.4e-18;
.ive 57; Mismatches 158; Indels 21; Gaps
G proteins that stimulate phosphoinositide hydrolysis.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- PTM: A proteolytic cleavage generates a new amino terminus that functions as a tethered ligand.
-!- SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                HSSP; P34996; 1DDD.
HSSP; P34996; 1DDD.
HD4erPro; IRR00276; GPCR_Rhodpsn.
Pfam; PF00001; 7tm 1; 1.
PRINTS; PR00237; GPCRRHODOSN.
PROSITE; PS00237; GPROTEIN RECEP F1 1; 1.
PROSITE; PS00227; G_PROTEIN RECEP F1 1; 1.
G-protein coupled receptor; Transmembrane; Glycoprotein; Signal; Blood coagulation.
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N-LINKED (GLCNAC. .) (POTENTIAL).
N-LINKED (GLCNAC. .) (POTENTIAL).
N-LINKED (GLCNAC. .) (POTENTIAL).
N-LINKED (GLCNAC. .) (FOTENTIAL).
118FC5FB39D4DE2C CRC64;
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EXTRACELLULAR (POTENTIAL).
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EXTRACELLULAR (POTENTIAL)
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EXTRACELLULAR (POTENTIAL)
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[POTENTIAL].
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(POTENTIAL).
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CLEAVAGE (BY THROMBIN).
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                  (POTENTIAL)
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Matches 101; Conservative
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DD 338 P-TWILLIANTSCHIEFFORTHARIA-CTCVCKSISCCIPPLIYYAGSECCRYVY 338 DILALAGGSSESSSSSTRTCHARIA-CTCVCKSISCCIPPLIYYAGSECCRYVY 338 DILALAGGSSESSSSSSTRTCHARSAN 3-44

DD 314 SILCCESSISSSSSSSTRTCHARSAN 3-44

DD 10-MCM-1995 STANDARD; PRT: 430 AA.

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SEQUENCE FROM N.A. Straington D.P., Chung M.-W., Lee K.L., Poel Nickerson D.A.; Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.

SEQUENCE FROM N.A.

novel

reveals

MEDLINE-91168254; PubMed=1672265; T.Y. Coughlin S.R.; Mindecular cloning of a functional thrombin receptor proteolytic mechanism of receptor activation."

SEQUENCE FROM N.A.

NCBI_TaxiD=9606;

proteclytic mechanism of Cell 64:1057-1068(1991).

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

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198
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180 CMEYSSMESVLGLPIMVLVAF-AIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRH 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          259 CHDVLSENLMOGFYSYYFSAFSAIFFLVPLIVSTVCYTSIIRCLSSSA-----VANRSKK 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314 SRALFLSAAVFCIFIVCFGPTNV----LLIVHYLFLSDSPGTEAAYFAYLLCVCVSSVSC 369
                                                                                                                                                                                                                                                                                                                                                                                            62 INCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLM 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             239 WRGCLLTLLMLVAVVVCFSPYHLNIKQFMARGMLHLPSCAERRAFLLSLQATVALMNMNC 298
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                                                                                                                                                                                                                                                                                                                                                                                                       CLEAVAGE (BY THROMBIN) (BY SIMILARITY)
                                                                                                                                                                                                                 (POTENTIAL). (POTENTIAL). (POTENTIAL).
   (BY
                                                                                                                                                                                                                                                                                                                                     14;
  FOR RECEPTOR ACTIVATION
                   PROTEINASE ACTIVATED RECEPTOR 1.
                                                                                                                                                                                                                                                                                                                        28.6%; Pred. No. 1.05-10,
tive 63; Mismatches 163; Indels
                                                                                                                                                                                                                                            F -> S (IN REF. 1).
G -> Y (IN REF. 1).
R -> G (IN REF. 1).
V -> L (IN REF. 1).
S -> T (IN REF. 1).
395FD64FAES2C9BF CRC64;
                                                                                                                            CYTOPLASMIC (POTENTIAL).
6 (POTENTIAL).
EXTRACELLULAR (POTENTIAL)
                                                                                             4 (POTENTIAL).
EXTRACELLULAR (POTENTIAL)
                                                         2 (POTENTIAL).
EXTRACELLULAR (POTENTIAL)
                            EXTRACELLULAR (POTENTIAL)
                                                                           3 (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
                                                (POTENTIAL)
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                                                                                                                           (POTENTIAL)
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N-LINKED (GLCNAC. . .)
N-LINKED (GLCNAC. . .)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                370 CIDPLIYYAASSECORHLYSILCCKESSDPNSCNST 405
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                                                                                                                                                         7 (POTENTIAL).
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                                                                                                                   (POTENTIAL)
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47790 MW;
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les 96, Conservative
                                                                                                                                    80
255
162
189
223
262
365
430 AA;
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CONFLICT
SEQUENCE
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DD PAR1 HL
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DT 28-FBB-
DT 15-SBP-
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MEDINE-Eye,
WEDINE-21388257; PubMed=12477932;
WEDINE-22388257; PubMed=12477932;
WEDINE-22388257; PubMed=12477932;
WEDINE-22388257; PubMed=12477932;
WALUSDER R.D., Peingold E.A., Grouse L.H., Derge J.G.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Alopkins R.P., Jordan H., Moore T., Max S.I., Wang J., Halte h. K.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Diatchenko L., Marusina K., Peterge A.A., Rubin G.M., Hong L.,
Bronstein M.J., Usdin T.B., Toshhyuki S., Carninci P., Prange C.,
Aronstein M.J., Usdin T.B., Toshhyuki S., Carninci P., Mullahy S.J.,
Bronstein M.J., Usdin T.B., Toshhyuki S., Carninci P., Mullahy S.J.,
Bronstein M.J., Woklarnan K.J., Malek J.A., Gunarane P.H.,
Richards S.A., McEwan P.J., McKertman R.J., Malek J.A., Gibbs R.A.,
Richards S.A., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Nhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Schnerch A., Schehu J.B., Jones S.J.M., Marra M.A.;
Generation and initial analysis of more than 15,000 full-length
N.M. Hunan and mouse cDNA sequences.",
L. Incol. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

```
FUNCTION: High affilinty receptor for activated thrombin coupled to G proteins that stimulate phosphoinositide hydrolysis. May play a robe in platelets activation and in vascular development.

SUBCELLULAR LOCATION: Integral membrane protein.

TISSUE SPRCIFICITY: PLATELETS AND VASCULAR ENDOTHELIAL CELLS.

FTM: A proteolytic cleavage generates a new amino terminus that functions as a tethered ligand.

FTM: Phosphorylated; probably mediating desenzitisation prior to the uncoupling and internalization of the receptor.

SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'Characterization of single-nucleotide polymorphisms in coding regions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cargill M., Altshuler D., Ireland J., Sklar P., Ardlie K., Patil N., Shaw N., Lane C.R., Lim E.P., Kalyanaraman N., Nemesh J., Ziaugra L., Friedland L., Rolfe A., Warrington J., Lipshutz R., Daley G.Q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VARIANT GLY-166.
MEDLINE=99318093; PubMed=10391209;
Cargill M., Altshuler D., Ireland J., Sklar P., Ardlie K., Patil N., Shaw N., Lane C.R., Lim E.P., Kalyanaraman N., Nemesh J., Ziaugra L. Friedland L., Rolfe A., Warrington J., Lipshutz R., Daley G.Q.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of human genes.";
Nat. Genet. 22:231-238(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lander E.S.;
Nat. Genet. 23:373~373(1999).
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PRIL HUMAN STANDARD; PRT; 425 AA.
P25116; Q36RF7; Q9BUN4;
01-MAY-1992 (Rel. 22, Created)
15-SEB-2003 (Rel. 42, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Proteinase activated receptor 1 precursor (PAR-1) (Thrombin receptor)
(Coagulation factor II receptor).
F2R OR PAR1 OR TR OR CF2R.
Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

"Protease-activated receptors 1 and 4 mediate activation of human platelets by thrombin.";

Clin. Invest. 103:879-887(1999).

MEDLINE-99178892; PubMed-10079109; Kahn M.L., Nakanishi-Matsui M., Shapiro M.J., Ishihara H., Coughlin S.R.;

FUNCTION

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                                                                                                                                                                                                                                                                                                                                                                                                                                               RG GO: 0005194; C:GGlgi apparatus; TAS.

RG GO: 0005887; C:integral to plasma membrane; TAS.

RG GO: 0005887; C:integral to plasma membrane; TAS.

RG GO: 0005887; C:integral to plasma activity; TAS.

RG GO: 0005912; F:treceptor lating activity; TAS.

RG GO: 0006915; P:ecceptor activity; TAS.

RG GO: 0006915; P:caspase activation; TAS.

RG GO: 0007275; P:caspase activation; TAS.

RG GO: 0007275; P:embrygenesis and morphogenesis; TAS.

RG GO: 0007275; P:embrygenesis and morphogenesis; TAS.

RG GO: 00007125; P:invasive growth; TAS.

RG GO: 00007165; P:signal transduction; TAS.

RG GO: 00007165; P:signal transduction; TAS.

RG GO: 00007165; P:signal transduction; TAS.

RG GO: 00007165; P:signal transduction; TAS.

RG GO: 00007165; P:signal transduction; TAS.

RG GO: 00007165; P:signal transduction; TAS.

RG GO: 00007260; P:tyrosine phosphorylation of STAT protein; TAS.

RG GO: 00007260; P:tyrosine phosphorylation of STAT protein; TAS.

REPROSITE: PRO0237; GFCRRHODOPSN.

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CYTOPLASMIC (POTENTIAL).
4 (POTENTIAL).
EXTRACELLULAR (POTENTIAL).
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CYTOPLASMIC (POTENTIAL)
                                                                                                                                                                                                                  EMBL; M62424; AAA36743.1; --
EMBL; AF391809; AAK69768.1; --
EMBL; BC002464; AAH02464.1; --
PIR; A37912.
PDB; INRN; 31-MAY-94.
PDB; INRN; 31-MAY-94.
PDB; INRN; 31-MAY-94.
Genew; HGNC:3537; F2R.
MIN; 187930; --
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335
364
425 AA;
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                                                                                      98 SSWLTLFVPSV-YTGVFVVSLPINIMAIVVFILKOKKYRKPAVVYMLHLATADVLFVSVLP 156
                                                                                                                                      85 GRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTA 144
                                                                                                                                                                                                                                                                                                    258 PYHLNIKQFWARGMLHLPSCAERRAFLLSLQATVALMNMNCGITPIIYFFASTHYRKWLL 317
                                                                                                                                                                                                                                                                                                                                                                     328 P--TNVLLIAHYSFLSHTSTTEAAYFAYLL--CVCVSSISCCIDPLIYYYASSECQRYVY 383
                                                                                                                                                         GRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLM-----VLV
                                                                                                                                                                                                                              AF-AIGFCGPVGILLSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFS
                                                                   SQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              !- SUBCELLULAR LOCATION: Integral membrane protein (Probable).
!- SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE=20193820; PubMed=10729156;
MEDLINE=20193820; PubMed=10729156;
MEDLINE=20193820; PubMed=10729156;
MITHE Genome of fowlpox virus.";
J. Virol. 74:3815-3831(2000).
                               21;
 Length 425;
                                 Indels
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CYTOPLASMIC (POTENTIAL).
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EXTRACELLULAR (POTENTIAL).
3 (POTENTIAL).
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InterPro; IPR000276; GPCR_Rhodpsn.
Pfam; PF00001; 7rm 1; 1.
PROSITE; PS00237; GPCRHODDPSN,
PROSITE; PS00237; GPROTEIN RECEP F1 1; 1.
PROSITE; PS50262; GPROTEIN RECEP F1 2; 1.
G-protein coupled receptor; Transmembrane; Glycoprotein.
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                              384 SILCCKESSDPSSYNSSGQLMASKMDTCSSNLNNSIY 420
                                                                                                                                                                                                                                                                                                                                                                                                                        318 GILKLKGSSSSSSSSSSTPGKASSETPSITQARGSMF 354
Query Match
18.8%; Score 352.5; DB 1;
Best Local Similarity 29.7%; Pred. No. 3.8e-18;
Matches 100; Conservative 57; Mismatches 159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
G-protein coupled receptor homolog FPV206.
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41
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Fowlpox virus (FPV)
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NCBI_TaxID=10261;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            248 Y----MIHIITSKTVLCENVSYYQMLLHATQCLMKKINCCMDPIIYLFVSSYKSKAKSNSI 303
                                                                                                                                                                                                                                                                                                                                                                                                                      88 VCYVLGSSWPPGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRA 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RLVCVAIWTLVILQTMPLLIMPMT-KPLVGKLACMEYSSMESVLGLPLMVLVAFA-IGFC 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GPVGIILSCYNKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQ 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     266 FWARGMIHLPS-----CAERRAFILSLQATVALMWWCGITPIIYFFASTHYRKWLLGIL 320
                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

MEDLINE=52381002; PubMed=1324917;

Zhong C., Hayzer D.J., Corsen M.A., Wick K., Runge M.S.;

"Molecular cloning of the rat vascular smooth muscle thrombin receptor. Byidence for in vitro regulation by basic fibroblast growth factor.";
                                                                                                                                                                                                                                                                                                                                           34 SLFYTALLVFSA--LGNILALCL----TCQKSRKINCTGIYLVHLAVSDLLFTVALPGRV
                                                                                                                                                                                                                                                                                                                                                                                                                                              74 DYYYYFFNWRWGEMACRIMSFLSYINTYVSINFWTWISVNRYYAVTRPHKYNSRDNIMRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-AUG-1992 (Rel. 23, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Proteinase activated receptor 1 precursor (PAR-1) (Thrombin receptor)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
                                                                                                                                                                                                                                                                                                          Gaps
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J. Balol. Chem. 267:16975-16979 (1992).
J. Balol. Chem. 267:16975-16979 (1992).
J. PUNCTION: High affinity receptor for activated thrombin coupled of proteins that stimulate phosphoinositide hydrolysis.
J. SUBCELLULAR LOCATION: Integral membrane protein.
J. SUBCELLULAR LOCATION: Integral membrane protein.
J. PTMN: A proteolytic cleavage generates a new amino terminus that functions as a tethered ligand.
J. SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                BY SIMILARITY.
N-LINKED (GLCNAC. .) (POTENTIAL)
N-LINKED (GLCNAC. .) (POTENTIAL)
                                                                                                                                                                                                                                                                                                          28;
                                                                                                                                                                                                                                                               18.2%; Score 341; DB 1; Length 308; 29.8%; Pred. No. 1.8e-17; ive 55; Mismatches 129; Indele
                4 (POTENTIAL).
EXTRACELLULAR
5 (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
6 (POTENTIAL).
FXTRACELLULAR (POTENTIAL).
7 (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
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  (POTENTIAL)
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01-AUG-1992 (Rel. 23, Last seq
28-FEB-2003 (Rel. 41, Last ann
                                                                                                                                                                                                                             35375 MW;
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133
1133
1154
1250
1250
1270
1308
140
                                                                                                                                                                                                                           308 AA;
                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
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between the Swiss Institute of Bioinformatics and the EMBL outstation-
the European Bioinformatics Institute. There are no restrictions on its
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modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               124 VSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLLMPMTKPLVGKLACMEY 183
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 PYFTPPTKIKTKIKDLN--VESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKIN
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                                                                                                                                                                                  EMBL; M61642; AAA42274.1;

PIR; A43448; A43448.

HSSP; P34996; 1DDD

HIGEPPOOR, 7tm 1; 1.

PRINTS; PR00237; GPCRRHODOPSN.

PROSITE; PS00237; GPRRHODOPSN.

PROSITE; PS00237; GPRCTEIN RECEP_F1_1; 1.

PROSITE; PS05625; GPOTEIN RECEP_F1_2; 1.

G-protein coupled receptor; Transmembrane; Glycoprotein; Signal; SIGNAL

SIGNAL

POTENTIAL.

POTENTIAL.

POTENTIAL.

POTENTIAL.
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(POTENTIAL).
(POTENTIAL).
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PROTBINASE ACTIVATED RECEPTOR 1.
EXTRACELLULAR (POTENTIAL).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18.1%; Score 339; DB 1; Length 43 29.0%; Pred. No. 3.5e-17; ive 61; Mismatches 153; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DD032B97ABA4A605 CRC64;
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EXTRACELLULAR (POTENTIAL)
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CYTOPLASMIC (POTENTIAL).
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ASP/GLU-RICH (ACIDIC).
POLY-PRO.
CLEAVAGE (BY THROMBIN) (
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N-LINKED (GLCNAC. . .)

N-LINKED (GLCNAC. . .)

N-LINKED (GLCNAC. . .)
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Length 420;

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Kenopodinae;
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                                                                                       01-FEB-1996 (Rel. 37, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Proteinase activated receptor 1 precursor (PAR-1) (Thrombin receptor).
Xenopus laevis (African clawed frog).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDIATE-94195429; PubMed=8145852;
GEFSTER F.E., Chen J., Ishii M., Ishii K., Nanevicz T.,
Turck C.W., Vu T.-K.H., Coughlin S.R.;
"Specificity of the thrombin receptor for agonist peptide is defined
by its extracellular surface.";
                                                                                                                                                                                                                                                                                                      -!- FUNCTION: High affinity receptor for activated thrombin coupled G proteins that stimulate phosphoinositide hydrolysis.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- PTM: A proteolytic cleavage generates a new amino terminus that functions as a tethered ligand.
-!- SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
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N-LINKED (GLCNAC. . .) (POTENTIAL).

N-LINKED (GLCNAC. . .) (POTENTIAL).

K->A: LACK OF ACTIVATION BY THROMBIN

DS163F56AFE12372 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PEAM; PP00001; 7tm 1; 1.

PRINTS; PR00237; GPCRRHONDSN.

PROSITE; PS02237; G PROTEIN RECEP F1 1; 1.

PROSITE; PS50262; G PROTEIN RECEP F1 2; 1.

G-protein coupled receptor; Transmembrane; Glycoprotein; Signal; Blood coagulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REMOVED FOR RECEPTOR ACTIVATION.
PROTEINASE ACTIVATED RECEPTOR 1.
EXTRACELLULAR (POTENTIAL).
1 (POTENTIAL).
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EXTRACELLULAR (POTENTIAL)
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EXTRACELLULAR (POTENTIAL)
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CYTOPLASMIC (POTENTIAL).
4 (POTENTIAL).
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                                                    420 AA
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InterPro; IPR000276; GPCR_Rhodpsn.
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                                                                               (Rel. 33, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U09632; AAA18498.1; -.
PIR; IS1667; IS1667.
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                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xenopodinae; Xenopus
                                                                                                                                                                                      NCBI_TaxID=8355;
                                                                            01-FEB-1996
01-FEB-1996
                                                     PARI XENLA
P47749;
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LCVFIICFGPTNV---LFLTH---YLQEANEFLYFAXILSACVG--SVSCCLDPLIXYYA 369
                                                                                                                                                       75
                                                                                                                                                                                                                              88 TKEARQYLSSQWLTKFVPSL-YTVV7FIVGLPLNLLAIIIFLFKMKVRKPAVVYMLNLAIA 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        207 MHSLSWRTMSRAYMACSFIWLISIASTIPLLVTEQTQ----KIPRLDITTCHDVLDLKDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           263 KDFYIYYFSSFCLLFFFUPFIITTICYIGIIRSLSSSSIENSC-----KKTRALFLAUVV
                                                                                                                                                                                                                                                                                                                                                            136 HWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LVAVVVCESPYHLNIKQFMARGMIHLPSCAERRAFLLSLQATVALMMMVGITPIIYFFA
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                                                                                                                                                       16 TKIKDINVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVS
                                                                           Gaps
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; in the neural plate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BIOL. Chem. 272:12583-12590(1997).

PHOLICIAN: RECEPPTOR FOR EXTRACELLULAR AIP, UTP, CTP, GTP AND ITP.
THE ACTIVITY OF THIS RECEPPOR EIGHDIATED BY G PROTEINS WHICH
ACTIVATE A PHOSPHATIDYLINOSITOL-CALCIUM SECOND MESSENGER SYSTEM.
MAY PLAY A KEY ROLE IN THE BARLY DEVELOPMENT OF NEURAL TISSUE.
SUBCELLULAR LOCATION: INTEGRAL MEMORANE PLOCESIN.
SUBCELLULAR BOLONGS TO PAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                           25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STHYRKWLLGILKLKGSSSSSSSSSSTPGKASSETPSITQARGSMF 354
                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-Neural plate;
BEDLINE-97284734; Pubmed-9139711;
BOGDANOV Y.D., Dale L., King B.F., Whittock N., Burn
"Early expression of a novel nucleotide receptor in
17.7%; Score 332.5; DB 1; 26.6%; Pred. No. 9.7e-17; ive 74; Mismatches 155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P7952;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
P2Y purinoceptor 8 (P2Y8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam, PP00001; 7tm 1; 1.
PRINTS: PR00231; GPCMFIN RECEP F1 1; PR0SITE; PS00237; G PROTEIN RECEP F1 2; PROSITE; PS50262; G PROTEIN RECEP F1 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR000276; GPCR_Rhodpsn.
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                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
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J. Biol. Chem. 272:129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xenopus.
                                              Similarity
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ÆDLINE=97432828; PubMed=9286708;
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26 N-LINKED (GLCNAC. . .) (POTENTIAL).
29 N-LINKED (GLCNAC. . .) (POTENTIAL).
62024 MW, B2CF24812F3C19F2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                58;
                                                                                                                                                                                                                                                                                                                                                                        Match 17.7%; Score 332; DB 1; Length 537; Local Similarity 25.1%; Pred. No. 1.3e-16; les 97; Conservative 70; Mismatches 162; Indels
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Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Butele
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
NCBI_TaxID=9606;
                                 1 (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
2 (POTENTIAL).
EXTRACELLULAR (POTENTIAL).
3 (POTENTIAL).
4 (POTENTIAL).
EXTRACELLULAR (POTENTIAL).
5 (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
6 (POTENTIAL).
EXTRACELLULAR (POTENTIAL).
7 (POTENTIAL).
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 Transmembrane; Glycoprotein. EXTRACELLULAR (POTENTIAL).
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Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases.
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(Rel. 35, Last sequence update)
(Rel. 42, Last annotation update)
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537 AA;
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                                                                                                                                                                                                                        Maier R., Glatz A., Mosbacher J., Bilbe G.; "Cloning of P2X6 CDNAs and identification of a pseudogene: comparison of P2X receptor subtype expression in bone and brain tissues."; Blochem. Biophys. Res. Commun. 237.297.302(1997).
                                   "Chromosomal localization of the human P2y6 purinoceptor gene and phylogenetic analysis of the P2y purinoceptor family."; Genomics 44:127-130(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gu J.R., Wan D.F., Zhao X.T., Zhou X.M., Jiang H.Q., Zhang P.P., John W.X., Huang Y., Qiu X.K., Qian L.F., He L.P., Li H.N., Yu Y., Yu J., Han L.H.; "Novel human cDNA clones with function of inhibiting cancer cell
Somers G.R., Hammet F., Woollatt E., Richards R.I., Southey M.C.,
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Puhl H.L. III, Ikeda S.R., Aronstam R.S.;
Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=98069816; PubMed=9412455;
Maier R., Glatz A., Mosbacher J., Bilbe G.;
Blochem. Biophys. Res. Commun. 240:298-302(1997)
                                                                                                                                                                      TISSUE=Placenta;
MEDLINE=97415792; PubMed=9268704;
MEDLINE=97415792; PubMed=9268704;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           130 PAVVCAHWGPRLRTAGR--ARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYS--- 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              238 HWRGCLLTLLMLVAVVVCFSPYHLNIKQFMA-RGMLHLPSCAERRAFLLSLQATVALMMM 296
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10 PPTKIKTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYL 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14 PPTTC------VYRENFKOLLLPPVYSAVLAAGLPLNICVITQICTSRRALTRTAVYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 34;
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to IP3 second
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15-JUL-1998 (Rel. 36, Last sequence update)
15-PEB-2003 (Rel. 41, Last annotation update)
C-C chemokine receptor type 8 (C-C CKR-8) (CCR-8).
EMBL; AF218005; AAG17247.1; -.

R EMBL; AF98920; AAM18129.1; -.

R EMBL; BC000391; AAH00391.1; -.

R EMBL; BC000391; AAH00391.1; -.

R HSRP; D4896; LDDD.

R Genew; HGNC: 8543; P2RV6.

MIN, 602481; -.

R GO; GO: 0007200; P:G-protein signaling, coupled to IP3 second InterPro; IPR000276; GPR-Rhodpsn.

R GO; GO: 0007200; P:G-protein signaling, coupled to IP3 second InterPro; IPR000276; GPR-Rhodpsn.

R PRINTS; PR00237; GPR-RHODPSN.

R PROSITE; PS00237; GPROTEIN RECEP FI.1; FALSE NEG.

R PROSITE; PS00237; GPROTEIN RECEP FI.1; FALSE NEG.

R PROSITE; PS00237; GPROTEIN RECEP FI.1; FALSE NEG.

R G-protein coupled receptor; Transmembrane; Glycoprotein.

T TRANSMEM 28 1 CTTOPLASMIC (POTENTIAL).

T TRANSMEM 28 2 (POTENTIAL).

T TRANSMEM 39 3 (POTENTIAL).

T TRANSMEM 49 61 122 31 (POTENTIAL).

T TRANSMEM 102 122 31 (POTENTIAL).

T TRANSMEM 102 122 31 (POTENTIAL).

T TRANSMEM 102 122 31 (POTENTIAL).
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MISSING (IN REF. 2).
AAD6C55A43818107 CRC64;
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EXTRACELLULAR (POTENTIAL)
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EXTRACELLULAR (POTENTIAL)
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EXTRACELLULAR (POTENTIAL)
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CYTOPLASMIC (POTENTIAL).
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CYTOPLASMIC (POTENTIAL).
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89; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                     Zingoni A., Soto H., Hedrick J.A., Stoppacciaro A., Storlazzi C.T., Sinigaglia F., D'Ambrosio D., O'Garra A., Robinson D., Rocchi M., Santoni A., Zlotnik A., Napolitano M.;
"The chemokine receptor CCR8 is preferentially expressed in Th2 but not Th1 cells.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. Immunol. 161;547-551(1998).
-!- FUNCTION: RECEPTOR FOR THE TCA-3 CHEMOKINE.
-!- SUBCELLULAR LOCATION. Integral membrane protein.
-!- SIMELARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
wus mudgulus (groupe).
Bukaryota, Metroupes, Orbordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMEL; 298206; CAB10896.1; --
EMBL; Z98206; CAB10895.1; --
EMBL; Z98206; CAB10895.1; --
EMBL; ARCO1277; AACS7598.1; --
EMBL; ARCO1277; AACS7598.1; --
EMBL; ARCO1277; AACS7598.1; --
EMBL; ARCO16493; F:C-C chemokine receptor activity; IDA.
GO; GO:0005315; F:C-C chemokines activity; IPI.
GO; GO:0005315; F:C-C chemokines.
InterPro; IPR000276; GPGR.Rhodpsn.
FRINTS; PR01530; CHEMOKINER8.
PRINTS; PR01530; CHEMOKINER8.
PROSITE; PS00237; GPCRHODOPSN.
PROSITE; PS00237; GPRCHODOPSN.
PROSITE; PS00237; GPRCHENBERREP_1_2; 1.
G-PROSITE; PS00237; GPROTEIN RECEP_1_2; 1.
G-PROSITE; PS05025; GPROTEIN RECEP_1_2; 1.
DOMAIN.
DOMAIN.
                                                                                                                                                                                          Zaballos A., Goya I.I., Gutierrez J., Varona R., Marquez Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
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EXTRACELLULAR (POTENTIAL).
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EXTRACELLULAR (POTENTIAL).
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CYTOPLASMIC (POTENTIAL).
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CYTOPLASMIC (POTENTIAL).
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 TGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACV 124
              SVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLIMPMTKPLVGKLACMEYS 184
                                                       |||| | || || || : : || || : : || || : svdrylaiveyqvasedgmiqcfqey 185
                                                                                       243
                                                                                                                                 -----LILLMLVAVVVCFSPYHLNIKQFMARGMLH----LPSCAERRAFLLSLQATV 291
                                                                                                                                               229 HNRTRAIKLVLTVVIVSLLFWVPF--NVALFLT--SLHDLHILDGCATRQRLALAIHVTE 284
                                                                                                                                                                              331
                                                                                                            01-OCT-1996 (Rel. 34, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
C-C chemokine receptor type 8 (C-C CKR-8) (CCR-8) (GPR-CY6)
(GPRCY6) (Ghemokine receptor-like 1) (CKR-L1) (TER1) (CMKBRL2) (CC-CCR8 OR CMKBR8 OR CKRL1)
                                                                                                                                                                                         MEDLINE=97351133; PubMed=9207005;
Tiffany H.L., Lautens L.L., Gao J.-L., Pease J., Locati M.,
Combadiere C., Modi W., Bonner T.I., Murphy P.M.;
"Identification of CCR8: a human monocyte and thymus receptor for the CC chemokine 1-309.";
J. Exp. Med. 186:165-170(1997).
                                                                                     SMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCL-
                                                                                                                                                                           292 ALMNWNCGITPIIYFFASTHYRKWLL-------GILKLKGSSSSSSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SECUENCE FROM N.A. MEDIAGE-9469461; MEDIAGE-9469461; MEDIAGE-9459365; PubMed-9469461; MEDIAGE-9459365; PubMed-9469461; Gutierrez J., Varona R., Kremer L., Zaballos A., Marquez G.; "Identification of CCR8 as the specific receptor for the human beta-chemokine I.3309; Goning and molecular characterization of murine CCR8 as the receptor for TCA-3."; CCR8 as the receptor fOG-378-1981(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Molecular cloing and chromosomal mapping of a novel human gene, ChemR1, expressed in T lymphocytes and polymorphonuclear cells and encoding a putative chemckine receptor.";

Eur. J. Immunol. 26:3021-3028(1996).
[5]
                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIINE=97040707; PubMed=8886020; Zaballos A., Varona R., Gutierrez J., Lind P., Marquez G.; "Molecular cloning and RNA expression of two new human chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

BENDLINE-97131825; PubMed=8977299;
Samson M., Stordeur P., Labbe O., Soularue P., Vassart G.,
Parmentier M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Biochem. Biophys. Res. Commun. 227:846-853(1996).
                                                                                                    355 AA
                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                        01-OCT-1996 (Rel. 34, Created)
                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     receptor-like genes."
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                                                                                                                                                                                                                                             345 HSST 348
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P51685;
                      68
                                           125
                                                                 126
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Eur. J. Immunol. 28:582-588(1998).

-!- FUNCTION: Receptor for the chemokines SCYA1/I-309, SCYA4/MIP-1-beta and SCYA1/TARC. May regulate monocyte chemotaxis and thymic cell line apoptosis. Alternative coreceptor with CD4 for HIV-1
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                                                                                                                                                                                        MEDLINE-98180363; PubMed-9521068;
Bernardini G., Hedrick J., Sozzani S., Luini W., Spinetti
Weiss M., Menon S., Zlotnik A., Mantovani A., Santoni A.,
SEQUENCE FROM N.A.
Nakajima T., Yoshida R., Harada S.;
Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases.
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EMBL; D49919; BAA23387.1; -...
EMBL; AF005210; AB62547.1; -...
PIR; JCS067; JCS067.
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EMBL; U62556; AAB05542.1; -.
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      QTVKIFLRSLFYTALLVFSALGN--ILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVAL
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SUBCELLULAR LOCATION: Integral membrane protein.
SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUFLED RECEPTORS.
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PRINTS; PR01533; CYSLTRECPTR.
PRINTS; PR00237; GPCRHODOPSN.
PROSITE; PS00237; G PROTEIN RECEP F1 1; FALSE NEG.
PROSITE; PS00262; G-PROTEIN RECEP F1 2; 1.

G-protein coupled receptor; Transmembrane; Glycoprotein.
DOMAIN 1 31 EXTRACELLULAR (POTENTIAL).
DOMAIN 53 60 CVARONIALLILL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receptors.";
Submitted (DEC-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Cysteinyl leukotriene receptor 1 (CysLTR1).
CYSLTR1 OR CYSLT1.
Sus scrofa (Pig).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Mammalais, Butheria; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       350
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InterPro; IPR004071; Cysleuk receptor.
InterPro; IPR000276; GPCR_Rhodpsn.
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258 PYHLNIK---QFMARGMLHLPSCAERRAFLLSLQATVALMNWNCGITPIIYFFASTHYRK 314
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79 FTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      139 PRIRTAGRARLVCVAIWTLVILQTMPLLIMPMTKPLVGKLACME-YSSMESVLGLPLMVI
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MEDINE=59370289; PubMed=7642634;
MEDINE=59370289; PubMed=7642634;
Prowar C.A., Meyer A., Nemeth K., Bacon K.B., Hoogewerf A.J.,
Proudfoot A.E.I., Wells T.N.C.;
"Molecular cloring and functional expression of a novel CC chemokine
"molecular cloring and functional expression of a novel CC chemokine
Teceptor CDNA from a human basophilic cell line.";
J. Biol. Chem. 270:19495-19500(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                             (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         17.2%; Score 323.5; DB 1; Length 340; 27.5%; Pred. No. 3.5e-16; ive 62; Mismatches 156; Indels 19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CKR4_HUMAN STANDARD; PRT; 360 AA.
P51679; Q9ULV6; Q9ULV7;
01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last samotation update)
C-C chemokine receptor type 4 (C-C CKR-4) (CC-CKR-4)
2 (POTENTIAL).
EXTRACELLULAR (POTENTIAL).
                                                                                                                                                                                                                                                                                                             N-LINKED (GLCNAC. . . ) (PO
N-LINKED (GLCNAC. . . ) (PO
N-LINKED (GLCNAC. . . ) (PO
N-LINKED (GLCNAC. . . ) (PO
S4F9372A121CE413 CRC64;
                                                                                                                                                                                        6 (POTENTIAL).
EXTRACELLULAR (POTENTIAL)
7 (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
                                                                                             4 (POTENTIAL).
EXTRACELLULAR (POTENTIAL)
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SEQUENCE FROM N.A., AND VARIANTS VAL-130 AND SER-178
                                                                   (POTENTIAL)
                                                                                                                                                                                                                                                                                     BY SIMILARITY.
                                                 (POTENTIAL)
                                                                                                                                            (POTENTIAL)
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                                                   3 (POTENTIA)
CYTOPLASMIC
                                                                                                                                         5 (POTENTIA
CYTOPLASMIC
                                                                                                                                                                                                                                                                                                                                                                                                               38986 MW;
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Mammalia; Butheria; Primates;
MCBI_TaxID=9606;
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tes 90; Conserv
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Homo sapiens (F
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Immunol. 1644408462000).
FUNCTION: HIGH AFFINITY RECEPTOR FOR THE C-C TYPE CHEMOXINES
TARC/SCYAL7 AND MDC/SCYA22. THE ACTIVITY OF THIS RECEPTOR IS
MEDIATED BY G(1) PROTEINS WHICH ACTIVATE A PHOSPHATIDYLINOSITOL-
CALCIUM SECOND MESSENGER SYSTEM. CAN FUNCTION AS A CHEMOATTRACTANT
MONING RECEPTOR ON CIRCULATING MEMORY LYMPHOCYTES AND AS A
CORECEPTOR FOR SOME PRIMARY HIV-2 ISOLATES. IN THE CNS, COULD
MEDIATE HIPPOCAMPAL-NEURON SURVIVAL.
              Kato H., Tsuchiya N., Izumi S., Miyamasu M., Nakajima T., Kawasaki H., Hitał K., Tokkunaga K.;
Hitał K., Tokkunaga K.;
"Now variations of human CC-chemokine receptors CCR3 and CCR4.";
Genes Immun. 1:97-104(1999).
                                                                                                                                                                                                                              MEDLINE-98104168, PubMed-9430724;
Imal T., Chantry D., Raport C.J., Wood C.L., Nishimura M., Godiska R.,
Yoshie O., Gray P., W.,
"Macrophage-derived chemokine is a functional ligand for the CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Integral membrane protein.

TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE THYMUS, IN

TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE THYMUS, IN

PERIPHERAL BLOOD LEUKOCYTES, INCLUDING T CELLS, MOSTLY COT+ CELLS,

AND BASOPHILS, AND IN PLATELETS, AT LOWER LEVELS, IN THE SPLEEN

AND IN MONOCYTES. DETECTED ALSO IN MACROPHAGES, IL-2-ACTIVATED

ONES EXPRESSING THE CATANEOUS LYMPHOCYTE ANTIGEN (CLA). EXPRESSED

IN BRAIN MICROVASCULAR AND CORONARY ARTERY ENDOTHELIAL CELLS.

PHY IN NATURAL KILLER CELLS, SCYRAZ BINDING INDUCES

PHOSPHORYLATION ON YET UNDEFINED SERVERS HAD 2.
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MEDLINE=20219238; PubMed=10754297;
Inngjerdingen M., Damaj B., Maghazachi A.A.;
"Human NK cells express CC chemokine receptors 4 and 8 and respond to thymus and activation-regulated chemokine, macrophage-derived chemokine, and I-309.";
                                                                                                                                                                                                                                                                                                                                                               MEDLINE=99394604; PubMed=10466728; Campbell J.J., Gin S., Ponath P., Campbell J.J., Warnke R., Ruffing N., Kassam N., Wu L., Butcher E.C.; The chemokine receptor CCR4 in vascular recegnition by cutaneous but not intestinal memory T cells."; Nature 400:776-780(1999).
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                                                                                                                               Yoshie
                                                                                                             MEDLINE=97313486; PubMed=9169480;
Imai T., Baba M., Nishimura M., Kakizaki M., Takagi S., Yosh
The T cell-directed CC chemokine TARC is a highly specific
biological ligand for CC chemokine receptor 4.";
J. Biol. Chem. 272:15036-15042(1997).
                                                                                                                                                                                                                                                                                                                 Biol. Chem. 273:1764-1768(1998).
MEDLINE=21040311; PubMed=11196669;
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EMBL; AB023889; BAA86966.1; --
EMBL; AB023899; BAA86967.1; --
EMBL; AB023891; BAA86968.1; --
EMBL; AB023892; BAA86968.1; --
EMBL; AB023892; BAA86969.1; --
EMBL; AB023892; BAA86969.1; --
GGENEW; HGNC:1605; CCR4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      259 -NIVLFLETLVELEVLODČTFERYLDYALOATETLAFVHČCLNPILYFFLGEKFRKYILO 317
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GO; GO:0005887; C:integral to plasma membrane; TAS.
GO; GO:0004950; F:chemokine receptor activity; TAS.
GO; GO:0006935; P:chemokine receptor activity; TAS.
GO; GO:0007204; P:cytosolic calcium ion concentration elevation; TAS.
GO; GO:0006955; P:immune response; TAS.
GO; GO:0006954; P:inflammatory response; TAS.
InterPro; IPR00227; GPCR_Rhodpsn.
PREm; PF00001; 7tm 1; 1.
PRINTS; PR00237; GPCRRHODOPSN.
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CYTOPLASMIC (POTENTIAL).
N-LINKED (GLCNAC. .) (POTENTIAL).
N-LINKED (GLCNAC. .) (POTENTIAL).
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                                                                                                                                                                                                      PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; 1.
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
G-protein coupled receptor; Transmembrane; Glycoprotein; Phosphorylation; Polymorphism.
                                                                                                                                                                                                                                                                                                    EXTRACELLULAR (POTENTIAL).
1 (POTENTIAL).
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EXTRACELLULAR (POTENTIAL).
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EXTRACELLULAR (POTENTIAL)
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EXTRACELLULAR (POTENTIAL)
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Matches 93; Conservative
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1 MIKLGPYFTPPTKIKTKIKD.....SETPSITQARGSMFLAEHVV 360
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Maximum Match 100%
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_bacteriap:*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPTREMBL 23:*
1: sp_archea:*
2: sp_bacteria:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rodent:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sp_archeap:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sp_plant:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sp_virus:*
                                                                   - protein search,
                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                          Scoring table:
                                                                     OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                              Searched:
                                                                                                      Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		d			SUMMARIES	
Result No.	Score	Query Match	f Query Match Length DB	DB	ID	Description
-	387.5	20.7	339	4	Q8N5S7	Qan5s7 homo sapien
7	332.5	17.7	361	11	Q8VHP3	Q8vhp3 cavia porce
٣	324	17.3	355	4	Q9BYX5	Q9byx5 homo sapien
4	323	17.2	337	4	Q81V19	Q8iv19 homo sagien
ເກ	316.5	16.9	372	4	Q9H1C0	Q9h1c0 homo sapien
w	314.5	16.8	360	11	Q91ZH4	Q91zh4 rattus norv
7	313.5	16.7	355	9	Q8HZN4	Q8hzn4 cercopithec
œ	310.5	16.6	355	9	Q8HZN5	Q8hzn5 macaca mula
σ	309.5	16.5	355	9	O9HZN6	Q8hzn6 pongo pygma
10	309	16.5	355	9	Q9MYJ8	Q9myj8 callithrix
11	308.5	16.4	360	ø	QBMJWB	Q8mjw8 canis famil
12	306.5	16.3	355	4	QBIUZ1	Q8iuz1 homo sapien
13	306.5	16.3	355	9	Q8HZN8	Q8hzn8 pan troglod
14	306.5	16.3	362	4	OBNETO	Q8nel0 homo sapien
15	305	16.3	352	11	Q8BY68	Q8by68 mus musculu
16	304.5	16.2	355	ø	O8HZN7	O8hzn7 gorilla gor

		Q8bmc0 musculu	apid	Q9qwn6 mus musculu	raja	Q9erk9 mus musculu	Q8k1z6 mus musculu	Q9jii9 rattus norv	Q8bkk1 mus musculu	ratt	Q91wi0 mus musculu	Q8r528 mus musculu	ยน	Q8n6t6 homo sapien	ຍນຄ		093237 cyprinus ca		QBqfr6 xenopus lae	Q9ptf7 brachydanio	brac	mus	_	xeno	Q8bvf1 mus musculu	Osphbs musculu		Q9pvy7 anguilla an
093239	057466	QBBMC0	Q8HZN3	9NMQ6Q	Q9DE05	O9ERK9	Q8K1Z6	GIICO	Q8BKK1	0971760	Q91WIO	Q8R528	QBBLG2	9BN6T6	QBBYI1	QBBUDO	093237	Q9BXC0	Q8QFR6	Q9PTF7	Q98U14	Q8K3M7	Q8C131	Q90X57	QBBVF1	OBBHBB	QBCBJO	Q9PVY7
13	13	7	9	11	13	ਜ	11	11	11	17	11	11	11	4	11	11	13	4	13	13	13	17	11	13	11	11	11	13
342	374	344	355	367	357	328	331	367	370	362	362	309	370	350	375	365	372	346	360	353	377	359	343	361	377	359	354	359
16.2	16.2	16.2	16.0	16.0	16.0	15.8	15.7	15.7	15.6	15.5	15.5	15.4	15.4	15.4	15.4	15.4	15.4	15.3	15.3	15.3	15.2	15.2	15.1	15.1	15.1	15.1	15.0	15.0
304	304	303.5	300.5	ō	299.5	296	294.5	294.5	293.5	290.5	290.5	289.5	289.5	288.5	288.5	288	288	287	287	286.5	286	284.5	283	283	283	282.5	281	281
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

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96 WPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVALW 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ທ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     156 TLVLLQTMPLLLMPMTKPLVGKLACME-YSSMESVLGLPLMVLVAFAIGFCGPVGIILSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (Human).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 20.7%; Score 387.5; DB 4; Length 339; Best Local Similarity 30.2%; Pred. No. 1.3e-27; Matches 94; Conservative 57; Mismatches 143; Indels 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

TISSUE-Brain, and Lung;
Straubberg R.;
Submitted (UN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC031653; AAH31653.1; -.
InterPro; IPR000276; GPCR_Rhodpsn.
Pfam; PR00001; 7rm1; 1. -.
PRINTS; PR00037; GPCRRHODDPSN.
PROSITE; PS00237; G_PROTEIN_RECEP_FI_1; 1.
PROSITE; PS50262; G_PROTEIN_RECEP_FI_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        339 AA; 37860 MW; BB0CAFD0FC371D63 CRC64;
                                                                                                                       Q8NSS7;
01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-WAR-2003 (TrEMBLrel. 23, Last annotation update)
G protein-coupled receptor 17.
                                                                                339 AA
                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Receptor.
SEQUENCE
                                                                                     Q8N5S7
RESULT 1
                                          28N5S7
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NCBI_TaxID=9606;
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Q8IV19;
                            Q9BYX5
RESULT 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85 SDLLFVLSLPFWG----YYAADQWVFGLGVCKMISWIYLVGFYSGIFFIVLMSIDRYLAI 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141 VHGVFSMRVRTFTYGVITSLATWAVAVFASLPGLLFSTCYTERNHTSCKTRYSANSTTWK 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        193 PLMVLVAFAIGFCGPVGIILSCYMKI--TWKLCSTAREDPVTSRKGRHWRGCLLTLLLMLV 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201 VLSSLEINILGEVIPLGIMLFCYSMIRTLQHCKSKKKNKAVK--------MIF 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             251 AVVVCF----SPYHLNIKQFMARGMLHLPSCAERRAFLLSLQATVALMNMVCGITPIIYF 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ||||| | ::|:||||| | 247 AVVVLFLGFWIPYNIVLFLYTVELEVLQDCSLEKYLDFALQATETLAFIHCLNPIIYF 306
157 VVVAVAMAPLLVSPQTVQTNHTVVCLQLYREKAS----HHALVSLAVAFTFPFITTVTC 211
                                                                                                                267 ASCATQRILALANRITSCLTSINGALDPIMYFFVAEKFRHALCNILCGKRLKGPPPSFEG 326
                                                                   212 YLLIIRSLRQGLRVE----KRIKTKAVRMIAIVLAIFLVĆFVPYHVNRSVYVLHYRSHG 266
                                                                                               275 PSCAERRAFLLSLQATVALMMNCGITPIIYFFASTHYRKWLLGIL---KLKG---SSSS 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KTKIKDINVESQTVKI FLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAV
                                                                                                                                                                                                                                                                                                                                                                                                              Jopling L.A., Sabroe I., Andrew D.P., Mitchell T.J., Li Y.,
Hodge M.R., Williams T.J., Pease J.E.,
The identification, characterization and distribution of guinea pig
CCR4 and epitope mapping of a biocking antibody.",
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
BMBL, AF431971, AL157488.1,
PRINTS, PRO00276, GPER_Rhodpen.
PRANTS, PRO001, 7tm 1, 1.
PRINTS, PRO0101, 7tm 1, 1.
PROSITE; PS50262; G_PERHODOPSN.
PROSITE; PS50262; G_PROTEIN RECEP_F1_1, 1.
                                          YMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFMARGMLHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                       CC-chemokine receptor 4.
Cavia porcellus (Guinea pig).
Eukaryots, Métazoa; Chordaea; Craniata, Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17.7%; Score 332.5; DB 11; Length 361; 27.1%; Pred. No. 1.7e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67; Mismatches 136; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361 AA; 41064 MW; 9304E897D4FD6839 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FLGEKFRKYIVQLFKTCRGPFAPCQYCALLRIYSNDTSSSYT
                                                                                                                                                                                                                                                                            01-MAR-2002 (TrEMBLrel. 20, Created)
01-WAR-2002 (TrEMBLrel. 20, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                    361 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FASTHYRKWLLGILK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93; Conservative
                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                       329 SSSSSSTPGKA 339
                                                                                                                                                                                  327 KTNESSLSAKS 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=10141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local 9
                                                                                                                                                                                                                                                                   Q8VHP3;
                                                                                                                                                                                                                                                    Овиньз
                                                                                                                                                                                                                          RESULT 2
Q8VHP3
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143
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88
                                                                                                                                                                                                                                                                                                                                                                                                                            promoters.";

promoters.";

c. 1. SUBCELLULAR LOCATION: INTEGRAL MEMBRANE PROTEIN (BY SIMILARITY).

c. 1. SUBCELLULAR LOCATION: INTEGRAL MEMBRANE PROTEIN (BY SIMILARITY).

REMBL; AYOLG370; AAKG8628.1;

RICEPPO; IPRO04068; CC. Chenkine8.

RICEPPO; IPRO04066; GPCR Khodpsn.

Pfam; PF00001; 7tm 1; 1.

PRO1530; GPCRKHODOPSN.

PROSTIE; PRO1530; CHENOKINERS.

PROSTIE; PRO1530; CHENOKINERS.

PROSTIE; PRO2524; GPCREHODOPSN.

PROSTIE; PRO2526; GPROTEIN RECEP. F1 1; 1.

GPCREHODER. RECEP. F1 1; 1.

GPCREHODER. RECEP. F1 1; 1.

GPCREHODER. RECEP. F1 1; 1.

GPCREHODER. RECEP. Transmembrane.

GR GPCREHOR. RECEP. Transmembrane.

GR GPCREHOR. RECEP. Transmembrane.

GR GEQUENCE 355 AA; 40830 MW; D4167F3433B75042 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           147 IRMGTTLCLAVWLTAINATIPLLVFYQVASEDGVLOCYSFYNQQT----LKWKIFTNFKMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      204 ILGILIPFTIFMFCYIKILHQLKRCQNHNKT------KAIRLVLIVVIASLLFWVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  259 YHLNIKQFMARGMLHLPSCAERRAFLLSLQATVALMNNNCGITPIIYFFASTHYRKWL--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31 QTNGKLLLAVFYCLLFVFSLLGNSLVILVLVVCKKTRSI--TDVYLLNLALSDLLFVFSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              204 FCG---PVGIILSCYMKITWKL--CSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26 QTVKIFLRSLFYTALLVFSALGN -- ILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84 PGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
11-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Hypothetical protein.
Homo sapiens (Human).
Busryvotas, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates, Catarrhini; Hominidae; Homo.
NCBI_TAXID=9606;
                                                                                                                                                                                                                    Eukaryoča; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                   DeVries M.E., Xu L., Kelvin A.A., Kelvin D.J.; and CCR8 "Identification and characterization of the CX3CR1 and CCR8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 4; Length 355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65; Mismatches 145; Indels
                                                                                    Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314 IFQKSCSQIFNYLGRQMPRESCEKSSSCQQHSSRSSS 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  317 ------LGILKLKGSSSSSSSSSTPGKASS 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 26.4%; Pred. No. 1e-21;
Matches 89; Conservative 65; Mismatches 14
Ą
                                                         Created)
                                                      (TrEMBLrel. 17, (TrEMBLrel. 17, (TrEMBLrel. 23,
                                                   01-UUN-2001 (TEEMBLEEL 17
01-UUN-2001 (TEEMBLEEL 17
01-MAR-2003 (TEEMBLEEL 25
CC chemokine receptor 8.
CCR8.
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   PRELIMINARY;
                                                                                                                                                                                                     sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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081V19
1D 081V
AC 081V
DT 01-M
DT 01-M
DT 01-M
DE HYPO
OC MAMM
OX NCBI
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to the EMBL/GenBank/DDBJ databases

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Submitted (APR-2002)
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Best Local 9
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Q91ZH4;
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                                                                                                                                                                                                                                                                                                                                                                                                         87 GIWLFGDFLCRLSTYALYVALYCSIFFMTAMSFFRCIAIVFPVQNINLVTQKKARFVCVG 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INTLVLLQTMPLLLMPMTXPLVGKLACME----YSSMESVLGLPLMVLVAFAIGFCGPVG 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFMAR 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93
                                                                                                                                                                                                                                                                                                                                    98
                                                                                                                                                                                                                                                                                                                      27 STLYSMISUVGFFGNGFVLYVLIKTYHKKSAFQVYMINLAVADLLCVCTLPLRVVYYVHK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLG
                                                                                                                                                                                                                                                                                                                                                                                 94 SSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVA
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01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Putative G protein-coupled receptor 92 (Putative G-protein coupled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human
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MIDLINES-201.7346, PubMed=11062477,
White K.E., Evans W.E., O'Riordan J.L.H., Speer M.C., Econs M.J.,
Lorenz-Depiereux B., Grabowski M., Meitinger T., Strom T.M.;
Attocsomal dominant hypophosphataemic rickets is associated with
mutations in FGP23.";
Nat. Genet. 26:345-348(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (Human).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vanti W.B., Arkhitko
                                                                                                                                                                                                                                               20;
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MEDLINE-21458557; PubMed=11574155;
Lee D.K., Nauyen T., Lynch K.R., Cheng R., Vanti W.B., Arkhitk.
Lewis T., Evans J.F., deorge S.R., O'Dowd B.F.;
"Discovery and mapping of ten novel G protein-coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
Takeda S., Kadowaki S., Haga T., Takaesu H., Mitaku S.;
"Identification of G protein-coupled receptor genes from the
                                                                                                                                                                                                    Length 337;
                                                                                                                                                                                                  17.2%; Score 323; DB 4; Length 33 29.9%; Pred. No. 1.2e-21; cive 50; Mismatches 150; Indels
                                                           Straubberg R.;
Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC035/56; AAH35/56.1; -.
Hypothetical protein.
SEQUENCE 337 AA; 38486 MW; B9B09CE0FD305245 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  372 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SSSSSSTPGKASS 341
                                                                                                                                                                                                                         Local Similarity 29.9:
es 94; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         receptor).
GRP92 OR GPR93 OR GPCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gene 275:83-91(2001).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9606;
                                                 TISSUE=Pancreas;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           265 QF-MARGMIHLPSCAERRAFILSLQATVALMNMNCGITPIIYFFASTHYRKWLLGILKLK 323
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24 LHLVVYSLVLARAGEPELNALALMVFERALRVHSVVSVYMCNLAASDLLFTLSLPVRLSYYA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               32 IRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VAIWTLVLLQTMPLLLMPMT----KPLVGKLACMEYSSMESVLG--LPLMVLVAFAIGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus norvegious (Rat).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17;
                                                                                                                                                                                                                                                                                                                                                                                                                 Length 372;
                                                                                                                                                                                                                                                                                                                                                                                                                    ; Score 316.5; DB 4; Length
; Pred. No. 5.2e-21;
59; Mismatches 150; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           glomerulonephritis.";
Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases
EMBL; AF432872; AAL30398.2; -.
                                              Strausberg R.;
Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ272207; CAC03715.1; -.
EMBL; AF411112; AAL26483.1; -.
EMBL; AB083600; BAB93313.1; -.
EMBL; BC033571; AAH33571.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41116 MW; A71EC9D402B7FC06 CRC64;
                                                                                                                                                                                                                                                                                                                                                                  372 AA; 41346 MW; BA35709084BB6D84 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-DEC-2001 (TrEMBLrel. 19, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                         Genew, HGNC:13307; GPR92.
InterPro; IPR000276; GPCR_Rhodpsn.
Pfam, PF00001; 7tm_1; 1.
PR00137; GPCRHYDDPSN.
PR0SITE; PS00237; GPCRHYDDPSN.
PROSITE; PS00262; G_PROTEIN_RECEP_F1_1; 1.
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                       TISSUE=Primary B-Cells from Tonsils;
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                                                                                                                                                                                                                                                                                                                                                                                                                    16.9%;
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SEQUENCE FROM N.A.
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SEQUENCE
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SEQUENCE
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355 AA; 40293 MW;
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95; Conserva
                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                         NCBI_TaxID=9544;
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01-MAR-2003
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Matches 95
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     212 TFGFILPLLIMLFCYGFTLRILFK------AHWGQKHRAMRVIFAVVLIFLLCWL 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PYHL-NIKQFMARGMLHLPSCAERRAFLLSLQATVALMNWNCGITPIIYFFASTHYRKWL 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRT 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97 P--IWAAAKKNGWIFGTFLCKVVSLLKEVNFYSGILLLACISVDRYLAIUHA---TRTLT 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QKRYLVKEVCLSIWGLSLLLALPVLLFRRTVYPTYISPVCYEDMGNNTAKWRWVLRILPQ 211
                                                                                                                                                                                             260
                                                                                              87 VVCYVIGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGR 146
                                                                                                                       153
                                                                                                                                             147 ARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLMVLVAFAIGFCG 206
                                                                                                                                                                  GVITSLITMSVAVEASLPGLLFSTCDTENNHTYCKTQYSVNSTTWKVLSSLEINVLGLVI 213
                                                                                                                                                                                                            LNIKQFMAR--GMLHLPSCAERRAFLLSLQATVALMNMNCGITPIIYFFASTHYRKWLLG 318
                                                                                                                                                                                                                                                              - NVVLFLETLVELEVLQDCTLERYLDYAIQATETLAFIHCCLNPVIYFFLGEKFKKYIAQ 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           37 ESLEINKYFVVIIYALVFLLSLLGNSLVMLVILHSRVGRSVTDVYLLNLAMADLLFALTL 96
                                                86
                                                                      96
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201 AIGFCGPVGIILSCY----MKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFS
                                                                                                           PVGIILSCYMKI--TWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCF---SPYH
                                                              39 EVFLPPL-YSLVFLLGLFGNSVVVLVLFKYKRLKSMTDVYLLNLAISDLLFVLSLPFWG-
                                                29 KIFLRSLFYTALLVFSALGNILALCLTCOKSRKINCTGIYLVHLAVSDLLFTVALP--GR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
11-MAR-2003 (TrEMBLrel. 23, Last annotation update)
11-MAR-2003 (TrEMBLrel. 23, Last annotation update)
11-MAR-2003 (TrEMBLrel. 23, Last annotation update)
12-MAR-2003 (TrEMBLrel. 23, Last annotata, Vertebrata, Buteleostomi, Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27;
                         45;
  Length 360;
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16.8%; Score 314.5; DB 11; Length
.larity 28.1%; Prad. No. 7.7e-21;
Conservative 60; Mismatches 133; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [1]
SEQUENCE FROM N.A.
HOLLICK R.A., Zhao J., Swanson R.N., Webb M.L., Strohl B Haldwin J.J., Auld D.S.;
"Orthologs of human receptors and methods of use.";
"Orthologs of human receptors EMBL/GenBank/DDBJ databases.
EMBL; AF540793; AAN17319.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               D464957687BBFEBF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16.7%; Score 313.5; DB 6; ilarity 28.5%; Pred. No. 9.4e-21; Conservative 58; Mismatches 153;
                                                                                                                                                                                                                                                                                                           ILK-----LKGSSSSSSSSST 335
                                                                                                                                                                                                                                                                                                                                                                                 355 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cercopithecinae; Cercopithecus. NCBI_TaxID=60710;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  355 AA; 40381 MW;
                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
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Best Local Similarity 2
               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                Q8HZN4;
01-MAR-2003
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     Query Match
                Best Local
Matches 9
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Q8HZN4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    258 PYHL-NIKQFWARGMIHLPSCAERRAFILSIQATVALMNMNCGITPIIYFFASTHYRKWL 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 143
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261 PYHLVILTDTIMRTRLIKETÖQRRNDIDRALDATEILGILHSCINPIIYAFIGGKFRHGL 320
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84 PGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    144 ACR--ARLVCVAIWTLVLLQTMPLLLLMPMTKPLVG-KLACMEYSSMESVLGLPLMVLVAF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201 AIGECGPVGIILSCY---MKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97 PIWAAAKUNG--WIFGTFLCKVVSLLKEVNFYSGILLLACISVDRYLAIVHA---TRILT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       261 PYHLVLIADTLMRTRLINETCQRRNNIDQALDATBILGILHSCLNPLIYAFIGQKFRHGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pongo pygmaeus (Orangutan).
Bukaryota; Metazoa; Chordate; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pongo.
[1]
                                                                                                                                                                                                                                                                                                           OI-MAR-2003 (TEMBELE1. 23, Last sequence update)
01-MAR-2003 (TEMBELE1. 23, Last sequence update)
Interleukin 8 receptor B CXCR2.
Macaca mulatta (Rhesus macaque).
Bukaryora, Metazoa, Chordata; Craniata, Vertebrata; Buteleostomi, Mammalia, Butheria) Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16.6%; Score 310.5; DB 6; Length ilarity 28.7%; Pred. No. 1.8e-20; Conservative 58; Mismatches 151; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                m.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6A9BF9A921F470C5 CRC64;
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01-WAR-2003 (TrEMBLrel. 23, Lamt sequence update)
10-WAR-2003 (TrEMBLrel. 23, Lamt annotation update)
Interleukin 8 receptor B CXCR2.
                                                                             LGILKLKGSSSSSS----SSSSTPGKASSETPS 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               317 LGILKLKGSSSSSS----SSSSTPGKASSET 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LKILATHGLISKDSLPKDSRPSFVGSSSGHT 351
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                                                                                                                                                                                                                                                        PRT;
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96

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37 YTALLVFSALGNILALCITCQKSRKINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSW
                                                                                                                                                                                                                                                                                                          360 AA
                                                                                                                                                                                                                                                                                                                              Created)
                                                                                                                                                                                                                                               325 VKWLPFLSVDRLERASSTSPST 346
                                                                                                                                                                                                                                     314 - KWL--LGILKLKGSSSSSSS 332
                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                      01-OCT-2002 (TrEMBLrel. 22, 01-OCT-2002 (TrEMBLrel. 22, 01-MAR-2003 (TrEMBLrel. 23, CC chemokine receptor 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92; Conservative
                                                                                                                                                                                                                                                                                                         PRELIMINARY;
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SEQUENCE
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Best Local S:
Matches 92
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Q8MJW8
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                                                                                                                                                                                                                                                                                                   211 QSFGFIVPLLIMLFCYGFTLRTLFK------AHMGQKHRAMRVIFAVVLIFLLCW 259
                                                                                                                                                                                                                   144 AGR--ARLVCVAIWTLVLLQTMPLLLLMPMT--KPLVGKLACMEYSSMESVLGLPLMVLVA 199
                                                                                                                                                                                                                                                                                                                              SPYHL-NIKQFMARGMUHLPSCAERRAFLLSLQATVALMNMNCGITPIIYFFASTHYRKW 315
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                                                                                                                                                                            24 ESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVAL
                                                                                                                                                                                                       84 PGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRT
                                                                                                                                                                                                                                                                                       FALGECGPVGILLSCY --- MKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Callithrix jacchus (Common marmoset).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Platyrrhini; Callitrichidae; Callit
                                                                                                                                            29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                42;
                                                                                                                      16.5%; Score 309.5; DB 6; Length 355; 28.0%; Pred. No. 2.2e-20; tive 64; Mismatches 146; Indels 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16.5%; Score 309; DB 6; Length 35 27.0%; Pred. No. 2.5e-20; ative 61; Mismatches 132; Indels
SEQUENCE FROM N.A.
Horlick R.A., Zhao J., Swanson R.N., Webb M.L., Strohl I Baldwin J.J., Auld D.S.;
"Orthologs of human receptors and methods of use.";
Submitted (AUG-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, ** #5540791; AAN17317.1; -. REQUENCE 355 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40928 MW; 2B01C47E9874A2C1 CRC64;
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-NAR-2003 (TrEMBLrel. 23, Last annotation update)
Chemokine receptor.
                                                                                                                                                                                                                                                                                                                                                                      LLGILKLKGSSSSSS----SSSSTPGKASSET 343
                                                                                                                                                                                                                                                                                                                                                                                         LLKILAIHGLISKDSLPKDSRPSFVGSSSGHT 351
                                                                                                                                                                                                                                                                                                                                                                                                                                            355 AA
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Best Local Similarity 27.0%
Matches 87; Conservative
                                                                                                                                          93; Conservative
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SEQUENCE
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                                                                                                                      Query Match
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Q9MYJ8
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268
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                     9
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                                                                                                                   100 VFGNAMCKVLSGFYYTGLYSEIFFIILLTIDRYLAIVHAVFALRARTVTFGVITSIIIWV
41 YSLVEVIGLYGVILVVVVJVQYKRIKAMTSIYLINLAISDLLFLFTLP-FWISYQLKTDW
                                                                               97 PFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWT
                                                                                                                                                                                                                                 209 GIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKOFWA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29 KIFLRSLFYTALLVFSALGNILALCLTCOKSRKINCTGIYLVHLAVSDLLFTVALP--GR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 39 ELFLPPL-YSLVFLFGLLGNSVVVVVLFKYKRLKSMTDVYLLNLAISDLLFVLSLPFWG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Euteleostomi;
Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Maeda S., Okayama T., Masuda K., Ohno K., Tsujimoto H.; "Detection of CC chemokine receptor 4 (CCR4) mRNA expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atopic skin lesion.;
Submitted (FRB-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AB080188; BAC10546-1;
INTERPRO; IPR000276; GPCR_Rhodpsn.
PRINTS; PR00031; 7tm 1; 1.
PROSITE; PR00237; GPCREHOOPSN.
PROSITE; PS50262; GPROTEIN RECEP F1 1; 1.
PROSITE; PS50262; GPROTEIN_RECEP_F1_2; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
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Swanson R.N., Webb M.L., Strohl B.

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Horlick R.A., Zhao J., Swanson R.N., Webb M.L., Strohl B
Baldwin J.J., Auld D.S.;
"Orthologs of human receptors and methods of use.";
Submitted (AUG-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AFS40789; AAN17315.1; -
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                                                                        SEQUENCE
                                                                                               Query Match
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VLVAPAIGFCGPVGIILSCY---MKITWKLCSTAREDPVTSRKGRHWRGCLLTLLMLVAV 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               207 RILPQSFGFIVPLLIMLFCYGFTLRTLFK------AHMGQKHRAMRVIFAVVLIF 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253 VVCFSPYHL-NIKQFMARGMLHLPSCAERRAFLLSLQATVALMNMNCGITPIIYFFASTH 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256 ILCWLPYNLVILADTLMRTQVIQETCERRNHIDRALDATEILGILHSCLNPLIYAFIGQK 315
                  LNIKQFMAR--GMLHLPSCAERRAFLLSLQATVALMMNCGITPIIYFFASTHYRKWLLG 318
                                                                                                                                                                                                                                                                                                                                                                                                                     83
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                                                                                                                                                                                                                                                                                                                                                                                                                   24 BSQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
101-MAR-2003 (TrEMBLrel. 23, Last annotation update)
11-MI-Leukin 8 receptor B CXCR2.
12-MAR-2004 (Chimpanzee)
13-MAR-2004 (Chimpanzee)
14-MAR-304 MAR-304 (Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Pan.
                                                                                                                                                                                                            Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                             37;
                                                                                                                                                                                                                                                                                                                                                                    16.3%; Score 306.5; DB 4; Length 355; 28.0%; Pred. No. 4.2e-20; ive 61; Mismatches 144; Indels 37
                                                                                                                                                                                                                                                                                               Strausberg R.;
Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC037961; AAH37961.1; -.
                                                                                                                                                                                                                                                                                                                                             355 AA; 40122 MW; 809AB63ADA6A42C6 CRC64;
                                                                                                                                                                        Last sequence update)
Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  312 YRKWLLGILKLKGSSSSSS----SSSSTPGKASSET
                                                                         318 LFKTCRGPFMLCQYCRLLQMYSPDTPSSYT 348
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                                                                                                                                                            01-MAR-2003 (TrEMBLrel. 23, 01-MAR-2003 (TrEMBLrel. 23, 01-MAR-2003 (TrEMBLrel. 23,
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Best Local Similarity zero
Best Local Similarity
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SEQUENCE FROM N.A.
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                                                     319 ILK----
                                                                                                                                                                                                                                           NCBI_TaxID=9606;
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                                                                                                                                                                                                                                                                                                                                     Receptor.
SEQUENCE
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                                                                                                          RESULT 12
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                                                                                                                                                                                                                               84 PGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYLMACVSVDHYPAVVCAHWGPRLRT
                                                                                                                                                                                                                                                                                                                                                                                                                     196 VLVAFAIGFCGPVGIILSCY---MKITWKLCSTAREDPVTSRKGRHWRGCLLTILMLVAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  207 RILDQSFGPIVPLLIMLFCYGFTLRTLFK------AHMGOKHRAMRVIFAVVLIF
                                                                                                                                                                                                                                                                                                                           144 AGR--ARLVCVAIWTLVLLQTMPLLLMPMT-----KPLVGKLACMEYSSMESVLGLPLM
                                                                                                                                                                                                                                                                                                                                                            97 PIWAASKUNG--WIFGTFLCKVVSLLKEVNFYSGILLLACISVDRYLAIVHA---TRTLT
                                                                                                                                      24 BSQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSRKINCTGIYLVHLAVSDLLFTVAL
                                                                                              Gaps
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                            37;
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                                               355;
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                                            / Match 16.3%; Score 306.5; DB 6; Length Local Similarity 28.0%; Pred. No. 4.2e-20; nes 94; Conservative 61; Mismatches 144; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Strausberg R.;
Submitted (AUG-2002) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BOCOECLAE3F81FB8 CRC64;
809AB63ADA6A42C6 CRC64;
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Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                312 YRKWLLGILKLKGSSSSSS----SSSSTPGKASSET 343
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InterPro; IRR000276; GPCR_Rhodpsn.
PEGM, PP00001; 7tm 1; 1.
PEGM: PP00001; 7tm 2; 1.
PROSITE; PS00237; GPROTEIN RECEP F1 1; 1.
PROSITE; PS50262; GPROTEIN RECEP F1 2; 1.
PROSITE; PS50262; GPROTEIN RECEP F1 2; 1.
SEQUENCE 362 AA; 41478 MW; BOCOECIAE3FE
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       355 AA; 40122 MW;
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Job time : 43 secs

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195 MYLVAFAIGFCGPVGIILSCYMKITWKLCSTARE--DPVTSRKGRHWRGCLLTLLMLVAV 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253 VVCFSPYHINIKOFMARGMLHLPSCAERRAFLLSLQATVALMNMVCGITPIIYFFASTHY 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         265 WLPYHVAVLLDIFSILHYIPFTCRLEHALFTALHVTQCLSLVHCCVNPVLXSFINRNYRY 324
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 76 PLRIY-YYINRHWPPQRALCLICFYLKYLNMYASIFFLITCISLQRCLFLLKPFRARNWKR 134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    187 MYTAAELGGEVLEVVIITYC----TWKTRKSLQEFQDEPQNIKERK-KALRMVLMCAVVF 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         242 IVCFTPYHLNFPFFWAVKQRVFSNCSFIRNTLCFHIISLCLANINCCLDPVVYYFMTSEF 301
                                                                                                                        156 RKKMVRRVVCILVWLLAFCVSLPDTYZLKTVTSASNNETYCRSFYPEHSIKEWLIG---M 212
                                                                                                                                                                                                                     196 VLVAPAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWRGCLLTLIMLVAVVVC 255
                                                                                                                                                                                                                                                                                                                                                                     PSPYHLNIKQFMARGMLHLP-SCAERRAFILSLQATVALMNMNCGITPIIYFFASTHYRK 314
96 TIPVWVVSLVQHNQWPMGBLTCKVTHLIFSINLFGSIFFLTCMSVDRYLSITYFTNTPSS 155
                                                                     RTAGRARLYCVAIWTLVLLQTMP--LLLMPMTKPLVGKLACM----EYSSMESVLGLPLM 195
                                                                                                                                                                                                                                                                        213 ELVSVVLGFAVPFSIVAVFYFLLARAISASSDQBKHSSRK-----IIFSYVVVFLVC 264
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the RIKEN Genome Exploration Research Group Phase I & II Team,
"Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";
Mature 420:563-573(2002).
EMBL: AKO41140; BAC31049.1; -.
SEQUENCE 352 AA; 40382 MW; C9977E40202AB4EA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28;
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27.9%; Pred. No. 5.7e-20;
ive 59; Mismatches 130; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-MAR-2003 (TrEMBLrel. 23, Last sequence update) Similar to putative purinergic receptor P2Y10. Bukarvie: "Act of Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315 WLL------GILKLKGSSSSSSSS 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           325 ELMKAFIFKYSAKTGLTKLIDASRVSETEYS 355
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STRAIN-CSTBL/GJ, TISSUE-THymus;
MEDLINE-22354683; PubMed=12466851;
The FANTOM COMBOTTIUM:
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Best Local Similarity 27.9%
Matches 84; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
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Human bone marrow
Peptide #10919 enc
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G protein coupled receptor related protein; human, GPCR; cardiomyopathy; atherosclerosis, diabetes; cancer; stroke; von Hippel-Lindau syndrome; Alteimer's disease; tuberous sclerosis; hypercalcemia; Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome; multiple sclerosis; ataxia-telangiectasia; leukodystrophy, addiction; anxiety; depression; pain; obseity; Crohn's disease; infertility; hypertension; scleroderna; arthmat, human immunodeficiency virus; autoimmune disease; HIV;
                                                                                                                                                                                                                                                                                            AL IGNMENTS
       AAU16320
ABU55389
ABG58455
ABB43053
ABB26224
                                                                                                                                                                                   AAG08169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                infection; graft-versus-host disease.
                                            AAM63955
                                                           AAM20996
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                                                                  AAM36882
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                                                                                                                                                                                                                                                                                                                                 ABG32286 standard; Protein; 360 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-JAN-2001; 2001US-259552P.
09-JAN-2001; 2001US-260544P.
20-MAR-2001; 2001US-277405P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-JAN-2002; 2002WO-US00056.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                               Human GPCR16 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200264793-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                               15-NOV-2002
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ABG32286;
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ABG32286
Drosophila melanog
Novel human secret
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Human novel polype
Novel human diagno
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        GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.
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                                                                                                                                     1107863 segs, 158726573 residues
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ABG66698
ABG14682
AAU19222
AAU25588
ABB70853
ABB70839
AAU32705
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Query

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360 86 86 70 70 112 112

Human

(CURA-) CURAGEN CORP.

Kekuda R; Smithson G, Ellerman K, Edinger SR, Muralidhara P; Casman SJ,

2002-643487/69. N-PSDB; ABS64723 New isolated G protein coupled receptor polypeptides and polynuclectides, useful in gene therapy, particularly for treating preventing cardiomyopathy, atherosclerosis, diabetes, multiple preventing cardiomyopathy, atherosclersclersclersclers; Crohn's disease or cancer

Claim 1; Page 98; 252pp; English.

This invention relates to a new isolated G-protein coupled receptor

(GPCRX) polypeptide, GPCRX nucleic acid and an antibody specific to the protein

are useful for treating, preventing or alleviating a GPCRX-associated

disorder or a pathological state in a subject, particularly a human. In

particular, the disorder is cardiomyopathy, atherosolarosis, diabetes,

constitution. The GPCRX polypeptide and nucleic acid are also useful for

disporder related to cell signal processing and metabolic pathway

consideration. The GPCRX polypeptide and nucleic acid are also useful for

disponsing the presence of or predisposition to a disease associated

with altered levels of GPCRX, particularly cancer. The GPCRX nucleic

acid and polypeptide are especially useful in the manufacture of a

medicament for therapeutic or prophylactic applications for disorders

associated with aberrant GPCRX expression or activity, e.g. von

Hippel-Lindau syndrome, Alzheimer's disease, Huntingron's disease,

sclerosis, Mypercalcaemia, Parkinson's disease, tuberous

contaxia-telangicctasia, leukodystrophies, addiction, anxiety, depression,

creebral palsy, epilepsy, Leech-Wyban syndrome, multiple solerosis,

ataxia-telangicctasia, leukodystrophies, addiction, anxiety, depression,

creebral palsy, cpilepsy, Leech-Wyban syndrome, multiple solerosis,

ataxia-telangicctasia, leukodystrophies, addiction, anxiety, depression,

creabral palsy, chinal, bacterial in proteomin, autoimmune disease,

creabral palsy, bacterial or protocoral infections, or graft-versus

chost disease, The DNA encoding the protein is useful in gene therapy

con treating the above conditions. The polypeptides can be used as

condition, preventive medicine, and pharmacogenomics. These are also useful

in developing powerful asay system for functional manysis of various

them disease, as well as in diamospic applications. The present human disorders, as well as in diagnostic applications. The present sequence represents a human G protein coupled receptor related protein sequence represents a hu (GPCR) of the invention

360 AA; Sequence

ö ô DB 23; Length 360; 0; Indels 100.0%; Score 360; I 100.0%; Pred. No. 0; tive 0; Mismatches Query Match Best Local Similarity 100. Matches 360; Conservative

1 MIKLGPYFTPPTKIKTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR 60 1 MIKLGPYFTPPTKIKTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR

181 MEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR

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d ò 181 MEYSSMESVIGLPLMVIVAPAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR 240

121 MACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLAC 180

GCLITLIMINAVVVCFSPYHLNIKQFMARGMLHLPSCAERRAFLLSLQATVALMMMVGI 300 GCLLTLLMLVAVVVCFSPYHLNIKQFWARGMLHLPSCAERRAFILSLQATVALMNMVCGI 300 241

301 TPIIYFFASTHYRKWILGILKLKGSSSSSSSSSTPGKASSETPSITQARGSMFLAEHVV 360 301 TPIIYFFASTHYRKWILGILKLKGSSSSSSSSSTPGKASSETPSITQARGSMFLAEHVV 360 ð

RESULT 2 **ABG66698**

ABG66698 standard; Protein; 110 AA

ABG66698;

(first entry) 30-AUG-2002 Human novel polypeptide #33.

Human, inflammatory condition, shock, sepsis, immune response; cancer; wound healing; central nervous system disease; haematopoiesis; peripheral nervous system disease; amyotrophic lateral sclerosis; tendon; myeloid cell disorder; lymphoid cell disorder; platelet disorder; bone; cartilage; ligament; nerve tissue; ulcer; osteoporosis; osteoarthritis; bone degenerative disorder; periodontal disease; reperfusion injury; lung fibrosis; liver fibrosis; autoimmune disorder; baccerial infection; allergic condition; thrombolysis; thrombosis; coaqulation disorder; fungal infection

WO200244340-A2

06-JUN-2002.

30-NOV-2001; 2001WO-US47004.

30-NOV-2000; 2000US-0028952.

HYSE-) HYSEQ INC

ä Wang Wang J, Asundi V, Liu C, Zhou P, Drmanac RT; Goodrich RW, famazaki V, Tang

WPI; 2002-508509/54. N-PSDB; ABK94922.

Novel nucleic acids and polypeptides for diagnosis, treatment of inflammatory, autoimmune, nervous system, myeloid or lymphoid cell disorders, cancer and promoting wound healing -

Claim 10; Page 600; 672pp; English.

regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth, tissue repair, healing of burns, incisions ulcers, treatment of desceptorais, osteoarthritis, bone degenerative disorders and periodontal disease. The sequences of the invention are also useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, immune deficiencies and disorders including severe combined immunodeficiency (SCID), bacterial or fungal infections, autoimmune disorders e.g. multiple sclerosis and myasthenia gravis, allergic conditions such as asthma, thrombolysis or thrombosis and coagulation disorders. Sequences ABG66666-ABG66758 represent human novel polypeptides of the invention. The invention relates to human novel polynucleotides and associated polypeptides. The polynucleotides and polypeptides are useful for treating inflammatory conditions such as arthritis, nephritis, Crohn's disease, ischaemia-reperfusion injury, shock, sepsis, immune responses and cancer and for promoting wound healing. The sequences are used to brain tissue, and are useful for the treatment of central and peripheral nervous system diseases and neuropathies, such as Alzheimer's disease, Parkinson's disease and neuropathies, such as Alzheimer's disease, sclerosis. The sequences are involved in chemotactic or chemokinetic activity, regulation of haematopolesis, treatment of myeloid or lymphoid cell disorders and platelet disorders such as thrombocytopenia.

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at ftp.wipo.int/pub/published_pct_sequences
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the inventoring transfer to isolated polymerecide [1] and and polymetrase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of [11]. The polymuclectides are also used in diagnostics as expressed sequence tags for identifying expressed genes. [1] is useful in gene therapy techniques for identifying expressed genes. [1] is useful in gene therapy techniques to restore normal activity of [11] or to treat disease states involving [11]. [11] is useful for generating antibodies against it, detecting or quantitating a polymeptide in tissue, as molecular weight markers and as a food supplement. [11] and its binding partners are useful in medical modes of sizes expressing [11]. [11] and [11] are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymucleotide sequences have applications in responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and among acid sequences. ABG0010-ABG30377 represent novel human and amno acid sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
                                                       ö
                                                                                141 LRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLMVLVAF 200
                                                                                                    21 LRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLMVTVAF 80
                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                        Human, chromosome mapping, gene mapping, gene therapy, forensic; food supplement, medical imaging, diagnostic, genetic disorder.
                                                       o;
                            Length 110;
                                                     0; Indels
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                            DB 23; L
                           Query Match 23.9%; Score 86; DB Best Local Similarity 100.0%; Pred. No. 2.8 Matches 86; Conservative 0; Mismatches
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                                                                                                                                     201 AIGECGPVGIILSCYMKITWKLCSTA 226
                                                                                                                                                          81 AIGFCGPVGIILSCYMKITWKLCSTA 106
                                                                                                                                                                                                                                                                                                             Novel human diagnostic protein #14673.
                                                                                                                                                                                                                               ABG14682 standard; Protein; 377 AA
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23-AUG-2000; 2000US-0649167.
                                                                                                                                                                                                                                                                                   18-FEB-2002 (first entry)
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N-PSDB; AAS78869.
 110 AA;
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                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; G protein-coupled receptor; nGPCR-x; antiviral; analgesic; cytostatic; cardiant; antidiabetic; anoretic; hypotensive; hypertensive; antiparkinsonian; noctropic; neuroprotective; antidepressant; viral infection; HIV-1; human immunodeficiency virus; HIV-2; pain; cancer; metabolic disease; cardiovascular disease; type 2 diabetes; obesity; anorexia; hypotension; mypertension; mycocardial infarction; atherosclarosis; Parkinson's disease; psychosis; neurological disorder; schizophrenia; migraine; major depression; anxiety; mental disorder; manic depression; dyskinesia; Huntington's disease; Tourette's Syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Isolated nucleic acid molecules encoding G protein-coupled receptors termed nGPCR-x, useful in the treatment and diagnosis of viral infections, cancers and mental disorders (e.g. Parkinson's disease and schizophrenia) -
                                                                                                                         141 LRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLGLPLMVLVAF
                                                                                                                                                                              116 LRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMBYSSMESVLGLPLMVLVAF
                                                                   Gaps
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              Length 377;
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              DB 22; L
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23.9%; Scor.
100.0%; Pred. No. o...
... 0; Mismatches
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                                                                                                                                                                                                                                      201 AIGFCGPVGIILSCYMKITWKLCSTA 226
                                                                                                                                                                                                                                                                          176 AIGFCGPVGIILSCYMKITWKLCSTA 201
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAU19222 standard; Protein; 177 AA
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08-MAR-2000; 2000US-0187829.

08-MAR-2000; 2000US-0187829.

08-MAR-2000; 2000US-0187830.

08-MAR-2000; 2000US-0187833.
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08-MAR-2000; 2000US-0187714.
08-MAR-2000; 2000US-0187715.
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08-MAR-2000; 2000US-0188049.
08-MAR-2000; 2000US-0189294.
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08-MAR-2000; 2000US-0187928
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                         Local Similarity 100.
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11-JUL-2000; 2000US-0217370.
14-JUL-2000; 2000US-0218337.
20-JUL-2000; 2000US-0218492.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-SEP-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       51;
                                                                        Vogeli G,
                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                      The invention relates to novel isolated nucleic acid molecules encoding of protein-coupled receptors termed nGPCR-x. nGPCR-x polymucleotides, opolypeptides, and modulators may be used in the treatment of diseases and conditions such as infections, much as viral infections caused by HIV-1 (human immunodeficiency virus) or HIV-2, pain, cancers, metabolic and cardiovascular diseases and disorders (e.g., type 2 diabetes, obesity, anorexia, hypotension, myocardial infarction, anorexia, hypotension, miscass, and psychotic and neurological disorders, including schizophrenia, migraine, major depression, anxiety, mental disorder, manic depression, and diseases, and psychotic and neurological disorders, including schizophrenia, migraine, major depression, anxiety, mental disorder, manic depression, and major other diseases and syndromes listed in the specification.

CC modulators, may also be used in diagnostic assays for such diseases or conditions. The present sequence represents a G protein-coupled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; G-protein coupled receptor; GPCR; mental disorder; schizophrenia; attention deficit disorder; anxiety; depression; bipolar disorder; neurological disorder; Huntington's disease; dementia; obesity; anorexia; metabolic disorder; Huntington's disease; Tourette's syndrome; thrombosis; type 2 diabetes; cardiovascular disorder; myocardial inferction; cancer; cardiomyopathy; atherosclerosis; human immunodeficiency virus; HIV; viral infection; immunoștimulant; neuroleptic; nootropic; tranquiliser;
                                                                                                                                                                                                                                                                                                                  233 SRKGRHWRGCLLTLLMLVAVVVCFSPYHLNIKQFWARGMLHLPSCAERRAFLLSLQATVA 292
                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                               Query Match
19.4%; Score 70; DB 22; Length 177;
Best Local Similarity 100.0%; Pred. No. 1.5e-59;
Matches 70; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human G Protein-Coupled Receptor (GPCR) polypeptide #35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antidepressant; anorectic; gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAU25588 standard; Protein; 177 AA.
     Claim 31; Page 281; 336pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0184303.
2000US-0184304.
2000US-0184305.
2000US-0184397.
2000US-0186457.
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2000US-0188880.
2000US-0194344.
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2000US-0217369
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                                                                                                                                                                                                                                                                                                                                                                     293 LMNMNCGITP 302
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                                                                                                                                                                                                                                           Sequence 177 AA;
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02-MAR-2000;
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Sequences AAU25554-AAU255616 represent human G-protein coupled receptor. (GPCR) polypeptides of the invention. The proteins and their associated DDNA sequences can be used to identify compounds which bind to GPCR polypeptides and in screening for compounds that modulate GPCR activity. By screening a human subject for the presence of mutations in GPCR DNA, a GPCR-related disorder or a genetic predisposition can be diagnosed. The sequences can also be used for treatment and prevention of mental disorders such as schizophrenia, attention deficit disorder, anxiety, depression, dementia and bipolar disorder, neurological disorders such as huntington's disease and Tourette's syndrome, metabolic disorders such as obesity, anorexia and type 2 diabetes, cardiomyopathy and atherosclerosis, viral infections caused by HIV and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                  New isolated nucleic acid encoding a new G-protein coupled receptor polypeptide for detecting receptor modulators that can treat mental disorders, such as schizophrenia, anxiety, depression, or obesity -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141 LRTAGRARLYCVAIWTLVLLQTMPLLLMPMTKPLVGKLACMEYSSMESVLG 191
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                                                          Lind P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABB67853 standard; Protein; 311 AA
                                                                                                                                                                                                                                                                                                                                                      Claim 35; Page 83; 279pp; English.
                                                          Wood LS, Parodi LA,
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(PHAA ) PHARMACIA & UPJOHN CO
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11-JUL-2000; 2000US-0614150.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
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N-PSDB; ABL11956.
                                                                                                                            MPI; 2001-570628/64
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26-MAR-2002
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                                                                                                                                                                                               323
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                                                                                                                            Sequence
                                                                                                                                                 Query Match
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                                                                                                                                                                                    from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  range of human polypeptides, useful in genetic
therapy -
           New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
                                                                            The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and insecticides, therapeutics in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30311), expressed DNA sequences (ABL01810-ABL30311), expressed DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human, vaccination, gene therapy, nutritional supplement,
stem cell proliferation, haematopoiesis, nerve tissue regeneration,
immune suppression, immune stimulation, anti-inflammatory, leukaemia.
                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                       the printed
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                                                                                                                                                                      The sequence data for this patent did not form part of the pri
specification, but was obtained in electronic format directly
at ftp.wipo.int/pub/published_pct_sequences.
                                                      Disclosure; SEQ ID NO 30351; 21pp + Sequence Listing; English.
                                                                                                                                                                                                                                          Length 311,
                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                          3.6%; Score 13; DB 22; I. 000.0%; Pred. No. 0.00062;
                                                                                                                                                                                                                                                 100.0%; Prea. ....
                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel human secreted protein #3140.
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                                                                                                                                                                                                                                                                                                                                                                      AAU32649 standard; Protein; 106 AA
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26-JAN-2001; 2001US-0770160.
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                                                                                                                                                                                                                                                                                         324 GSSSSSSSSSTP 336
                                                                                                                                                                                                                                                                                                              GSSSSSSSSTP 200
                                                                                                                                                                                                                                                      Local Similarity 100,
nes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleic acids encoding a vaccination, testing and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-611725/70.
                                                                                                                                                  sequences (ABL01840
(ABB57737-ABB72072)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200179449-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                 interactions
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                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                                              AAU32649;
                                                                                                                                                                                                                                           Query Match
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ID AAU3
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The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention is useful in developmental biology and in elucidating cell signalling and cell.-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical furge. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL01840-ABL16175) and the encoded proteins
physiological interactions of the polypeptide. Vectors comprising the nucleic acids encoding the polypeptides and cells genetically engineered to express them are also useful for producing the proteins are useful in genetic vaccination, testing and thereby, and can be used as nutritional supplements. They may be used to increase stem cell proliferation; to regulate haematopoiesis; and in bone, cartilage, tendon and/or nerve tissue growth or regeneration; immune suppression and/or stimulation; as anti-inflammancry agents; and in treatment of leukaemias. ANUSDSIO-AAU33304 represent the amino acid sequences of novel human secreted proteins of the invention.
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. 0.0021;
ches 0; Indels
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100.0%; Pred. No. 0.0
ive 0; Mismatches
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11-JUL-2000; 2000US-0614150.
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N-PSDB; ABL14942.
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                                                                                                                                                                                                                                                                                                                                                                          106 AA;
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Local St.
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Human, open reading frame; ORFX; gene therapy; cancer; cirrhosis; hyperproliferative disorder; psoriasis; benign tumour; haemorrhage; degenerative disorder; osteoarthritis; neurodegenerative disorder; cardiovascollar disease, diabetes mellitus; systemic lupus erythematosus; hypertension; hypothyroidism; cholesterol ester storage disease; immune deficiency; immune disorder; infectious disease; autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis;

myasthenia gravis.

WO200192523-A2. Homo sapiens.

06-DEC-2001.

Human ORFX protein sequence SEQ ID NO:21886.

(first entry)

24-JUN-2002

ABP1:0952;

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ABP10952 standard; Protein; 86

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The invention relates to novel human secreted polypeptides. The polypeptides and antibodies to the polypeptides are useful for determining the presence of or predisposition to a disease associated with altered levels of polypeptide. The polypeptides are also useful for identifying agents (agonists and antagonists) that bind to them. Cells expressing the proteins are useful for identifying a therapeutic agent for use in treatment of a pathology related to aberrant expression or physiological interactions of the polypeptides and cells genetically engineered to express them are also useful for producing the proteins. They may be used to increase stem cell prodiferation; to regulate harmanching the proteins of the polypeptides and cells genetically confineered to express them are also useful for producing the proteins. They may be used to increase stem cell prodiferation; to regulate haematopolesis, and in bone, cartilage, tendon and/or nerve tissue growth or regeneration; impure suppression and/or stimulation; as anti-inflammatory agents; and in treatment of leukaemias. AAU2510-AAU3304 represent the amino acid in treatment of leukaemias. AAU2510-AAU3304 represent the amino acid sequences of novel human secreted proteins of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acids encoding a range of human polypeptides, useful in genetic
                                                                                                                                                                                                                                                                                                                                                            Human, vaccination; gene therapy; nutritional supplement; stem cell proliferation; haematopolesis; nerve tissue regeneration; immune suppression; immune stimulation; anti-inflammatory; leukaemia.
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3.3%; Score 12; DB 22; Length 1262; 00.0%; Pred. No. 0.022; ve 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 20; Page 652; 765pp; English.
                                                                                                                                                                                                                                                                                                                             Novel human secreted protein #3196
                                                                                                                                                                                                               AAU32705 standard; Protein; 85 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vaccination, testing and therapy
        100.08; Pre-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-APR-2001; 2001WO-US08656.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-APR-2000; 2000US-0552929.
26-JAN-2001; 2001US-0770160.
                                                                                                                                                                                                                                                                                           (first entry)
                                                                           324 GSSSSSSSST 335
                                                                                                                351 GSSSSSSSST 362
                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-611725/70.
                    Best Local Similarity
Matches 12; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HYSE-) HYSEQ INC.
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                                                                                                                                                                                                                                                                                        18-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-OCT-2001.
                                         12;
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                                                                                                                                                                                                                                                      AAU32705;
      Query Match
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30-MAY-2000; 2000US-206132P. 29-AUG-2000; 2000US-228716P. 29-MAY-2001; 2001WO-US10836.

Shimkets RA, Leach MD; (CURA-) CURAGEN CORP.

MPI; 2002-106308/14.

N-PSDB; ABN26704.

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The present invention describes substantially purified human proteins (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1 in the specification). ABN15762 to ABN27522 encode the human ORFX proteins given in ABP00101 to ABP11500. ORFX proteins are useful for treating or preventing a pathology associated with an ORFX-associated disorder in humans, and in the manufacture of a medicament for treating a syndrome associated with ORFX-associated disorder. ORFX polymucleotide can be used in gene therapy. ORFX sequences can be used in the therapy. ORFX sequences can be used in the therapy. ORFX sequences can be used in the treatment of cancer, hyperproliferative disorders, cirrhosis of liver, psoriasis, benign tumnours, keolid, degenerative disorders, haemorrhage, osteoarthritis, neurodegenerative disorders, disorders related to organ transplantation, cardiovascular diseases, disorders related to organ transplantation, cardiovascular diseases, disorders, infectious disease, autoimmune disorders such as multiple sclerois, infectious disease, autoimmune inflammatory eye disease. ORFX proteins are also useful for treating burns, incisions, ulcers, for treating osteoporosis, bone degenerative disorders, incisions, ulcers, for treating stom and for multiple sclerois are also to bone degenerative disorders, or periodontal disease, one fibrosis, croptical disorders, in various tissues and conditions resulting from the multiple cytokine damage.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B. The sequence data for this patent did not form part of the printed edification, but was obtained in electronic format directly from WIPO ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel human polypeptides and polynucleotides useful for diagnosing, preventing and treating cardiovascular disease, neurodegenerative, hyperproliferative disorders and autoimmune disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID 21886; 1037pp; English.
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DB 23;

3.1%; Score 11;

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Gaps

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3.1%; Score 11; DB 22; Length 85; 100.0%; Pred. No. 0.016; ive 0; Mismatches 0; Indels

Best Local Similarity 100. Matches 11, Conservative

Query Match

324 GSSSSSSSS 334

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42 GSSSSSSSSS 52

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01-887-2000
05-887-2000
06-887-2000
06-887-2000
08-887-2000
08-887-2000
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08-887-2000
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08-887-2000
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14-SEP-2000;
14-SEP-2000;
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20-OCT-2000;
20-OCT-2000;
01-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
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                                                                                                                               Human; immunosuppressive; antiarthritic; antirheumatic; cardiant; vasotropic; cerebroprotective; nootropic; cerediant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; opthalmalogical; vulnerary; secreted protein; rheumatoid arthritis; hyperproliferative disorder; cardiovascular disorder; cardiovascular disorder; cerebral isobaemia; angiogenesis; nervous system disorder; Alzheimer's disorder; infection; ocular disorder; corneal infection; wound haaling; epithelial cell proliferation; skin ageing; food additive; preservative; antiproliferative.
         Gaps
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Pred. No. 0.016; ; Mismatches 0; Indels
                                                                                                                  Human novel secreted protein, Seq ID 1273
                                                                     AAU16320 standard; Protein, 94 AA.
Best Local Similarity 100.0%; P:
Matches 11; Conservative 0;
                                                                                                                                                                                                                                                               31-JAN-2000; 2000US-0179065.
04-FEB-2000; 2000US-0186628.
22-MER-2000; 2000US-018664.
02-MER-2000; 2000US-0189874.
17-MER-2000; 2000US-0190076.
18-AFR-2000; 2000US-0190076.
19-MER-2000; 2000US-019123.
19-MER-2000; 2000US-019123.
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2000US-0220963.
2000US-0220964.
                                                                                                                                                                                                                                                  17-JAN-2001; 2001WO-US01341
                                                                                                  07-NOV-2001 (first entry)
                     324 GSSSSSSSSS 334
                                  GSSSSSSSS 37
                                                                                                                                                                                                                     WO200155322-A2
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                                                                                                                                                                                                        Homo sapiens
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                                                                                     AAU16320;
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The invention relates to isolated nucleic acid molecules and their encoded secreted proteins. The nucleic acids and proteins are used to prevent, treat or ameliotate a medical condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in diagnostic immunoassays e.g. radioimmunoassays or enzyme linked include autoimmune disease e.g. radioimmunoassays or enzyme linked include autoimmune disease e.g. rheumatoid arthritis, hyperproliferative disorders e.g. cardiac arrest, cerebral adsorders e.g. cardiac arrest, cerebrovascular disorders e.g. cardiac arrest, cerebral disorders e.g. Alzheimer's disease, infections caused by bacteria, viruses and fungicand coular disorders e.g. corneal infection, and many other of disorders e.g. corneal infection, and many other of prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemctasis. The polypeptides can also be used as food additive or prevent skin adong the to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemctasis. The polypeptides can also be as a food additive or preservative to increase or decrease storage capabilities, fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors and other mutritional components. The present sequence represents a novel secreted protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid molecules encoding 461 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions and used as food additives or preservatives -
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100.0%; Pred. No. 0.018;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 11; SEQ ID No 1273; 980pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ruben SM;
                                 2000US-0249215.
2000US-0249216.
2000US-0249217.
2000US-0249218.
2000US-0249244.
                                                                                                                                                                       2000US-0249265.
2000US-0249297.
2000US-0249299.
2000US-0249300.
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Best Local Similarity 100.
Matches 11; Conservative
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Human; neural disorder; immune system disorder; renal disorder; muscular disorder; disease; reproductive disorder; muscular disorder; publimonary disorder; cardiovascular disorder; hyperproliferative disorder; inflammatory disease; allergic reaction; blood related disorder; cancer; immunosuppressive; antinflammatory; cardiovascular; nephrotropic; cytostatic; antiallergic; thrombolytic; haemostatic; antiarteriosclerotic
ABUS5389 standard; Protein; 94 AA.
                                            Human novel polypeptide #476.
                                                                                                                                                                                                                                                                                                                                                                              000US-229509P
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                                                                                                                                                                      17-JAN-2001; 2001US-0764864
                              (first entry)
                                                                                                                                        US2002132753-A1
                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                       14-AUG-2000;
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22-AUG-2000;
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                             18-MAR-2003
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               ABU55389;
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01-NOV-2000;

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Gaps ö

324 GSSSSSSSS 334

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03-AUG-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0235359.
04-OCT-2000; 2000GB-0024263.
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04-OCT-2000;
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21-SEP-2000;
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                                                                                Penn SG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to human novel polypeptides and their associated polynucleotides. The polypeptides and polynucleotides are useful in gene therapy for treating, inhibiting or preventing neural disorders, immune system disorders (e.g. systemic lupus erythematosus, rheumatoid arthritis and multiple sclerosis), muscular disorders, respiratory diseases (e.g. nasal vestibulitis, nasal polyps and simusitis), reproductive disorders, gastrointestinal disorders, pulmonary disorders, cardiovascular disorders (e.g. congenital heart defects, Ebstein's anomaly and hypoplastic left heart syndrome), renal disorders (e.g. acute kinner and end-stage renal disease), hyperprofilerative disorders (e.g. Hoddxin's disease and leukaemia), inflammatory diseases (e.g. conditions (e.g. asthma), blood related disorders (e.g. thrombosis, atherosclerosis and myocardial infarction) and cancerous diseases.

Sequences ABUSSA914-ABUSSA99 and ABUSS748 represent human novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                           New polypeptides and nucleic acids, useful in gene therapy for treating, inhibiting or preventing e.g. neural, immune system, muscular, respiratory, reproductive, gastrointestinal, pulmonary, cardiovascular or renal disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, liver, cirrhosis, hyperlipoproteinaemia, hyperlipidaemia,
hypercholesterolaemia, coronary heart disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.1%; Score 11; DB 24; Length 94;
100.0%; Pred. No. 0.018;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                  Claim 11; SEQ ID NO 1273; 402pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human liver peptide, SEQ ID No 37103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABG58455 standard; Peptide; 104 AA.
                                                                                                    Rosen CA, Ruben SM, Barash SC;
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2000US-0207456.
2000US-0608408.
17-NOV-2000; 2000US-249299P.

08-DEC-2000; 2000US-251856P.

08-DEC-2000; 2000US-251868P.

08-DEC-2000; 2000US-251869P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 100
nes 11; Conservative
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                                                                                                                        WPI; 2003-147444/14.
N-PSDB; ABX73648.
                                                      (ROSE/) ROSEN C A.
(RUBE/) RUBEN S M.
(BARA/) BARASH S C.
                                                                                                                                                                                                                                                                                                                                                                                                                                      94 AA;
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26-MAY-2000; 2
30-JUN-2000; 2
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Whose: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                             probes useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptide #10559 encoded by human foetal liver single exon probe.
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                                                                                                                                                                                         Human genome-derived single exon nucleic acid analysing gene expression in human adult liver
                                                                                                                                                                                                                                                                                                 Claim 27; SEQ ID No 37103; 658pp; English
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                                                                   Chen W, Rank DR;
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(MOLE-) MOLECULAR DYNAMICS INC
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2000US-0207456.
2000US-0608408.
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2000US-0234687.
2000US-0236359.
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                                                            Hanzel DK,
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Protein #8223 encoded by probe for measuring heart cell gene expression.
                                                                                                                    The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human feetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a peptide encoded by a single exon nucleic acid probe of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from NIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart ABA21535-ABA41305). The present sequence is a protein encoded by one
                                         Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver
                                                                                         Claim 27; SEQ ID NO 35688; 639pp + sequence listing; English
                                                                                                                                                                                                                                                                                                                   3.1%; Score 11; 'DB 22; Length 104;
100.0%; Pred. No. 0.02;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; gene expression; heart; microarray; vascular system; cardiovascular disease; hypertension; cardiac arrhythmia; congenital heart disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 15; SEQ ID No 27994; 530pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen W, Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABB26224 standard; Protein; 104 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-AUG-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236359.
04-OCT-2000; 2000GB-0024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001; 2001WO-US00666.
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                                                                                                                                                                                                                                                                                                                                                     11; Conservative
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Best Local Similarity
Matches 11; Conserva
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            WPI; 2001-483447/52.
                                                                                                                                                                                                                                                                                      104 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens,
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probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease. Note: The sequence data for this patent did not form part of the specification, but was obtained in electronic format directly from WIPO at tp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                        Sequence
                  888888888888
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Gaps ô Length 104; 0; Indels 3.1%; Score 11; DB 22; 100.0%; Pred. No. 0.02; ive 0; Mismatches 0; Query Match
Best Local Similarity 100.

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325 SSSSSSSST 335 ઠે

93 SSSSSSSST 83 Search completed: February 19, 2004, 19:37:18 Job time : 44 secs

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Gaps

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Appli Appli Appli Appli Appli

Sequence

Sequence

Sequence

Sequence Sequence Sequence

Sequence

Sequence

Sequence Sequence Sequence

Sequence Sequence Sequence

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GENERAL INFORMATION:
APPLICANT: Gener, Thomas G.
APPLICANT: Clark, Stephen C.
APPLICANT: Clark, Stephen C.
APPLICANT: Threer, Katherine
APPLICANT: Hewick, Rodney M.
TITLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
CORRESPONDENCE ADDRESS:
ADDRESSE: Genetics Institute, Inc.
STREET: 87 Cambridge STREET: Massachusetts
COUNTRY: U.S.A.
ZIP: 02140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/757,022B
FILING DATE: 19910910
US-07-757-0228-50
US-07-757-0228-48
US-07-757-0228-52
US-07-757-0228-62
US-08-030-822A-90
US-09-171-156A-39
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US-09-171-156A-39
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                                                                                                                                                                                                                                                                          ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 530
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION UNBER: US 07/643,502
FILING DATE: 18-JAN-1991
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-UN-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/457,196
FILING DATE: 08-AUG-1889
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                            US-07-757-022B-12
; Sequence 12, Application US/07757022B
; Patent No. 6433142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: CSerr, Luann
REGISTRATION UNDRER: 31,822
REFERENCE/DOCKET NUMBER: GI 51
RELECOMMUNICATION INFORMATION:
TELEPAX: (617)876-1170
TELEPAX: (617)876-5851
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 43 amino acids
TYPE: AMINO ACID
  Sequence 27787, A
Sequence 30, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 579, App
Sequence 5812, Ap
                                                                                             February 19, 2004, 19:36:26 ; Search time 21 Seconds (without alignments) 725.329 Million cell updates/sec
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1 MIKLGPYFTPPTKIKTKIKD......SETPSITQARGSMFLAEHVV 360
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Sequence 54,
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Sequence 30,
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/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
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/cgn2_6/ptodata/1/iaa/PcTUS_COMB.pep:*
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                 GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
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US-07-757-022B-90
US-07-757-022B-94
US-07-757-022B-94
US-07-757-022B-94
US-07-757-022B-94
US-07-757-022B-96
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US-07-757-022B-64
US-07-757-022B-64
US-07-757-022B-64
US-07-757-022B-64
US-07-757-022B-64
US-08-825-991A-277B7
US-09-825-991A-277B7
US-09-845-860D-30
US-09-910-925-4
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US-07-757-022B-104
US-07-757-022B-142
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Gapop 60.0 , Gapext 60.0
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Maximum DB seq length: 2000000000
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Perfect score:
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No.
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Sequence 92, Application US/07757022B Patent No. 6433142
      168 SSSSSSSST 178
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APPLICANT: Gesner,
APPLICANT: Clark,
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US-07-75-022B-90

Sequence 90, Application US/07757022B

Patent No. 6433142

GENERAL INFORMATION:

APPLICANT: Gener, Thomas G.

APPLICANT: Clark, Stephen C.

APPLICANT: There, Katherine

APPLICANT: Hewick, Rodney M.

TITLE OF INVENTION: Megakaryocyte Stimulating Factors

NUMBER OF SEQUENCES: 143

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genetics Institute, Inc.

STREET: A. Clark Addressed Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continued Continue
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AUDKENSER:
STREET: 87 CambridgePark Drive
CITY: Cambridge
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: D214d S.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: FIDOPPY disk
COMPUTER READABLE FORM:
MEDIUM TYPE: FIDOPPY disk
COMPUTER READABLE FORM:
MEDIUM TYPE: TOPPY disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US 07/757,022B
FILING DATE: 18-JAN-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-JUN-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/457,196
FILING DATE: 39-BC-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/390,901
FILING DATE: 18-AUG-1989
FILING DATE: 18-AUG-1989
FILING DATE: 18-AUG-1989
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FILING DATE: 18-AUG-1989
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FILING DATE: 18-AUG-1989
FILING DATE: 18-AUG-1989
FILING DAT
                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
Matches 11; Conservative
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; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-757-022B-12
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APPLICANT: Gesner, Thomas G.
APPLICANT: Clark, Stephen C.
APPLICANT: Turner, Katherine
APPLICANT: Hewick, Rodney M.
TITLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
ADDRESSEE: Genetics Institute, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUNGESSEE: GENERICES INSTITUTE,
AUNGESSEE: GTANDIGGEPARK DIIVE
CITY: Cambridge
STATE: Massachusetts
COUNTRY: US.A.

ZIP: 02140
COMPUTER READABLE FORM:
MEDIUW TYPE: Floppy disk
COMPUTER: IBM PC compatible
OCMPUTER: IBM PC compatible
OCMPUTER: BAPENICH Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/757,022B
FILING DATE: 19910910
CLASSIFICATION DATA:
APPLICATION NUMBER: US 07/643,502
FILING DATE: 18-47M-1991
PRILING DATE: 29-40M-1990
PRILOM APPLICATION DATA:
APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-50C-1989
FILING DATE: 29-50C-1989
FILING DATE: 18-6C-1989
FILING DATE: 18-6C-1989
FILING DATE: 18-6C-1989
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FILING DATE: 19-0C-1980
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Sequence 132, Application US/07757022B
Patent No. 6433142
GENERAL INFORMATION:
APPLICANT: Gesner, Thomas G.
APPLICANT: Clark, Stephen C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: CSerr, Luann
REGISTRATION NUMBER: 31,822
REFERENCE/DOCKET NUMBER: GI 5190
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: Genetics Institute,
87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INDORMATION FOR SEQ ID NO. 92: SEQUENCE CHARACTERISTICS: LENGTH: 204 amit There are a more than a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a minimum and a mi
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TYPE: AMINO ACID
TOPOLOGY: linear
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325 SSSSSSSST 335

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US-07-75-022B-76

US-07-75-022B-76

Sequence 76, Application US/07757022B

Patent No. 6433142

Patent No. 6433142

APPLICANT: Gener, Thomas G.

APPLICANT: Glark, Stephen C.

APPLICANT: Hewick, Redney M.

TITLE OF INVENTION: Megakaryocyte Stimulating Factors

NUMBER OP SEQUENCES: 143

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genetics Institute, Inc.

SIREET: 87 CambridgePark Drive

CITY: CambridgePark Drive

COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11, DB 4; Length 209;
Pred. No. 0.016;
0; Mismatches 0; Indels
        ZIP: 02140
COMPUTER READABLE FORM:
MEDIUW TYPE: Ploppy disk
COMPUTER: IBM PC COMPAtible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
SUPTWARE: Patentin Release #1.0, Version #1.25
SUPTWARE: Patentin Release #1.0, Version #1.25
SUPTWARE: Patentin Release #1.0, Version #1.25
SUPTWARE: Patentin Release #1.0, Version #1.25
APPLICATION NUMBER: US/07/757,022B
FILING DATE: 19910910
PRIOR APPLICATION NUMBER: US 07/546,114
APPLICATION NUMBER: US 07/546,114
APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
PRIOR APPLICATION NUMBER: 31,822
FILING DATE: 08-AUG-1989
ATPONEY AGENT INPORMATION:
NAME: CGETT. LUANN
REGISTRATION NUMBER: 31,822
REBERRICE/DOCKET NUMBER: 31,822
REBERRICE/OFCET NUMBER: 31,822
REBERRICE/OFCET NUMBER: 31,822
REBERRICE/OFCET NUMBER: 31,822
REBERRICE/OFCET NUMBER: 31,822
REBERRICE/OFCET NUMBER: 31,822
REBERRICE/OFCET NUMBER: 31,822
REBERRICE/OFCET NUMBER: 31,822
REBERRICE/OFCET NUMBER: 31,822
RELEPHONE: (617)876-1170
TELEPHONE: (617)876-1170
TELEPHONE: (617)876-1170
TELEPHONE: (617)876-1170
INFORMATION FOR SEQ ID NO: 94:
SEQUENCE CHARACTERISTICS:
'-FMAGTH: 209 amino acids
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MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
GURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/757,022B
FILING DATE: 19910910
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100.0%; Pre
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AMINO ACID
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Best Local Similarity 100.
Matches 11; Conservative
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Pred. No. 0.016;
0; Mismatches 0; Indels
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Patent No. 6433142

GENERAL INFORMATION:
APPLICANT: Clark, Stephen C.
APPLICANT: Turner, Ratherine
APPLICANT: Turner, Ratherine
APPLICANT: Turner, Ratherine
APPLICANT: Hawick, Rodney M.
TITLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
CORRESPONDENCES: ADDRESS:
ADDRESSEE: Genetics Institute, Inc.
STREE: 87 CambridgePark Drive
CITY: CambridgePark Drive
STATE: Massachusetts
APPLICANT: Turner, Katherine
APPLICANT: Hewick, Rodney M.
TITLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
CORRESPONDENCE ADDRESS:
ADDRESSE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
CITY: Cambridge
STATE: Massachusetts
CONTRY: U.S.A.
ZIP: 02140
                                                                                                                                                                                                       Query Match 3.1%; Score 11; DB Best Local Similarity 100.0%; Pred. No. 0.0 Matches 11; Conservative 0; Mismatches
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US-07-757-022B-94
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
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Gaps

us-10-041-615-34.oli10.rai

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GENERAL INCRMATION:
APPLICANT: Clark, Stephen C.
APPLICANT: Clark, Stephen C.
APPLICANT: Turner. Katherine
APPLICANT: Turner. Katherine
APPLICANT: Turner. Katherine
APPLICANT: Turner. Katherine
APPLICANT: Turner. Katherine
APPLICANT: Hawick, Rodney M.
TITLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
CORRESPONDENCE ADDRESS: 143
CORRESPONDENCE ADDRESS: 2000
GITSET: Cambridge Park Drive
GITY: Cambridge Park Drive
GITY: Cambridge Park Drive
GITY: Cambridge Park Drive
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GITY: Cambridge Park Drive
GITY: Cambridge Park Drive
GITY: U.S.A.
ZIP: 02140
CONRUTER: INF PC Compatible
COMPUTER: INF PC Compatible
CONRUTER: INF PC Compatible
CONRUTER: INF PC Compatible
CONRUTER: INF PC Compatible
CONRUTER: 19910910
CLASSIFICATION NUMBER: US 07/643,502
FILING DATE: 1991091
PRICE APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-UUN-1990
PRICE APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
PRICE APPLICATION NUMBER: US 07/390,901
FILING DATE: 29-DEC-1989
PRICE APPLICATION NUMBER: US 07/390,901
FILING DATE: 08-AUG-1989
ATTORREY/AGENT INPERMATION:
NAME: CSert: Luann
REGISTRATION NUMBER: GI 5190
TELERCOMMUNICATION INPORMATION:
NAME: CSert: Luann
REGISTRATION NUMBER: GI 5190
TELERCOMMUNICATION INPORMATION:
TELEBONE: (617)976-1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 220;
APPLICATION NUMBER: US 07/390,901
FILING DATE: 08-AUG-1989
ATTORNEY/AGENT INFORMATION:
NAME: CSerr, Luann
REGISTRATION NUMBER: 31,822
KREPRENCE/DOCKET NUMBER: GI 5190
TELEPHONE: (617)876-1170
TELEPHONE: (617)876-5851
INFORMATION FOR SEQ ID NO: 96:
SEQUENCE CHARACTERISTICS:
LENGTH: 220 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 30, Application US/07757022B
Patent No. 6433142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
3.1%; Soc
Best Local Similarity 100.0%; P:
Matches 11; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                          220 amino acids
AMINO ACID
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     325 SSSSSSSST 335
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MOLECULE TYPE: protein
US-07-757-0228-96
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APPLICANT: Gener, Thomas G.
APPLICANT: Clark, Stephen C.
APPLICANT: Clark, Stephen C.
APPLICANT: Clark, Stephen C.
APPLICANT: Turner, Katherine
APPLICANT: Hewick, Rodney M.
TITLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
CORRESPONDENCES: 143
CORRESPONDENCES: 163
CORRESPONDENCES: 163
CONTRY: CambridgePark Drive
COUNTRY: CambridgePark Drive
COUNTRY: U.S.A.
CONFUTER: Massachusetts
COMPUTER: Plapy disk
COMPUTER: IBM PC compatible
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Pred. No. 0.017;
0; Mismatches 0; Indels
                                                       FILING DATE: 18-JAN-1991
PRICK APPLICATION DATA:
PRICK APPLICATION DATA:
APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-JUN 1990
PRIOR APPLICATION DATA:
APPLICATION DATA:
PRILING DATE: 29-DEC-1989
FILING DATE: 29-DEC-1989
FILING DATE: 29-DEC-1989
APPLICATION NUMBER: US 07/390,901
FILING DATE: 08-AUG-1989
ATTORNEY/AGENT INFORMATION:
NAME: CSETY, LUADIN
REGISTRATION NUMBER: 31,822
REFERENCE/DOCKET NUMBER: GI 5190
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)876-1170
SEQUENCE CHARACTERISTICS:
LENGTH 217 amino acids
TENERAL 217 amino acids
TENERAL 217 amino acids
TENERAL 217 amino acids
TENERAL 217 amino acids
TENERAL 217 amino acids
TENERAL 217 amino acids
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FILING DATE: 29-0...
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/457,196
   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/643,502
FILING DATE: 18-JAN-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-07-757-022B-96; Sequence 96, Application US/07757022B; Patent No. 6433142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           325 SSSSSSSST 335
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Pred. No. 0.023;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
US-09-229-911A-22
; Sequence 22, Application US/09229911A
; Patent No. 6187600;
; Patent NO. RAPPLICANTION:
; APPLICANT: Schulein, Martin
; Lassen, Lene N.
Lassen, Soren F.
; Kauppinen, Markus S.
                                                                                                                              Sequence 22, Application US/08651136C Patent No. 6001639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nieľsen, Ruby I.
Ihara, Michiko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                310 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 212-8978-9655
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 310 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.1
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        248 SSSSSSSSST 258
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              325 SSSSSSSST 335
                                             168 SSSSSSSSST 178
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3.1%; Score 11; DB 4; Length 296;
Best Local Similarity 100.0%; Pred. No. 0.022;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                 Score 11; DB 4; Length 231;
Pred. No. 0.018;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   Megakaryocyte Stimulating Factors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: EM PC Compatible
COMPUTER: TEM PC Compatible
CORPOTHER: TEM PC Compatible
CORPOTHER: TEM PC COMPOSIME:
CORPOTHER: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/757,022B
FILING DATE: 19910910
CLASSIFICATION DATA:
APPLICATION NUMBER: US 07/643,502
RICH APPLICATION DATA:
APPLICATION NUMBER: US 07/643,502
PRICE APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
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APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 07/457,196
FILING DATE: 20-DEC-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/390,901
FILING DATE: 08-AUG-1989
ATTORNEY/AGENT INFORMATION:
NAMR: CRETT. LABRE
                                                                                                          3.1%; Scor.
100.0%; Pred. No. v...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E: Genetics Institute, Inc.
87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                       Sequence 70, Application US/07757022B
Patent No. 6431142
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Gener, Thomas G.
APPLICANT: Turner, Xatherine
APPLICANT: Hewick, Rodney M.
TITLE OF INVENTION: Megakaryocyte St.
NUMBER OF SEQUENCES: 143
CORRESPONDENCE ADDRESS: 143
ADDRESSEE: Genetics Institute, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: GI 5190
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)876-1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: CSerr, Luann
REGISTRATION NUMBER: 31,822
                  ; IENGTH: 231 amino acids; TYPE: AMINO ACID TOPOLOGY: linear; MOLECULE TYPE: protein US-07-757-0228-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (617)876-5851
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADLA....STREET: 87 ......CITY: Cambridge
                                                                                                                Query Match
Best Local Similarity 100.
Matches 11; Conservative
SEQUENCE CHARACTERISTICS
LENGTH: 231 amino acid
                                                                                                                                                                                       325 SSSSSSSST 335
                                                                                                                                                                                                                        168 SSSSSSSST 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: Massachus
COUNTRY: U.S.A.
ZIP: 02140
                                                                                                                                                                                                                                                                          RESULT 9
US-07-757-022B-70
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us-10-041-615-34.oli10.rai

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Score 11; DB 4; Length 372;
Pred. No. 0.027;
0; Mismatches 0; Indels
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Patent No. 6433142
GENERAL INFORMATION:
APPLICANT: Gener, Thomas G.
APPLICANT: Turner, Ketherine
APPLICANT: Hewick, Rodney M.
TILLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTES: SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/757,022B
FILING DATE: 19910910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 19910910
CLASSIPICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/643,502
FILING DATE: 18-JAN-1991
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-JUN-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
CLASSIFICATION: 530

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/643,502
FILING DATE: 18-UAN-1991
FRICH APPLICATION NUMBER: US 07/546,114
APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-UN-1990
FRICH APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
FRICH APPLICATION NUMBER: US 07/457,196
FILING DATE: 08-AUG-1989
FILING DATE: 08-AUG-1989
FILING DATE: 08-AUG-1989
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Genetics Institute, Inc. STREET: 87 CambridgePark Drive CITY: Cambridge STATE: Massachusetts COUNTRY: U.S.A. ZIP: 02140
                                                                                                                                                                                                                                                                                              NAME: CBerr, Luann
REGISTRATION NUMBER: 31,822
RESTERENCE DOCKET NUMBER: GI 5190
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)876-1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 372 amino acids TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                  (617)876-5851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.1
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            325 SSSSSSSST 335
                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-07-757-022B-68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-07-757-022B-64
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                                                                         ADDRESSEE: No. 63876900 No. 6387690disk of No. 6387690th America, Inc. STREET: 405 Lexington Avenue, 64th Floor CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                 3.1%; Score 11; DB 4; Length 310; 100.0%; Pred. No. 0.023; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Gener, Thomas G.
APPLICANT: Gark, Stephen C.
APPLICANT: Turner, Katherine
APPLICANT: Turner, Katherine
APPLICANT: Hewick, Rodney M.
TITLE OF INVENTION: Megkaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
CITY: Cambridge
STATE: 02140
COUNTRY: U.S.A.
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC. Compatible
COMPUTER: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/757,022B
FILING DATE: 19910910
      TAKAGİ, Shinobu
TITLE OF INVENTION: No. 6387690el Endoglucanases
NUMBER OF SEQUENCES: 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 4366.200-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-867-0123
TELEPAX: 212-889-9655
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ) MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 22:
US-09-229-911A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 64, Application US/07757022B Patent No. 6433142
                                                 NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
Matches 11; Conservative
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Gaps

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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                       | Sequence 54, Application US/07757022B | Sequence 54, Application US/07757022B | Patent No. 6433142 | Patent No. 6433142 | Applicant Clark, Stephen C. Applicant Clark, Stephen C. Applicant Hewick, Rodney M. TITLE OF INVENTION: Megakaryocyte Stimulating Factors NUMBER OF SEQUENCES: 143 | CORRESPONDENCE ADDRESS: Genetics Institute, Inc.
                                                                                                                                                                                          Score 11; DB 4; Length 423;
Pred. No. 0.031;
                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 02140

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATURG SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US 07/757,022B
FILING DATE: 19910910
CLASSIPICATION DATA:
APPLICATION NUMBER: US 07/643,502
FILING DATE: 18-JAN-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/546,114
PRIOR APPLICATION DATA:
PFLING DATE: 29-DEC-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
PRIOR APPLICATION NUMBER: US 07/457,196
FILING DATE: 08-AUG-1989
ATTORNEY/AGENT INFORMATION:
NAME: CSETY LUANN
REGISTRATION NUMBER: 31,822
REGISTRATION NUMBER: 31,822
REGISTRATION NUMBER: 31,822
REGISTRATION NUMBER: 31,822
REGISTRATION NUMBER: 31,822
REGISTRATION NUMBER: GI 5190
TELECOMMUNICATION NUMBER: GI 5190
TELECOMMUNICATION NUMBER: GI 5190
TELECOMMUNICATION NUMBER: GI 5190
TELECOMMUNICATION NUMBER: GI 5190
TELECOMMUNICATION NUMBER: GI 5190
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.1%; Scc
Best Local Similarity 100.0%; Pr
Matches 11; Conservative 0;
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 463 amino acids
                                                         : 423 amino acids
AMINO ACID
                                                                                                                                                                                                                                                                                            325 SSSSSSSSST 335
                                                                                                                                                                                                                                                                                                                                            128 SSSSSSSST 138
          INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
LENGTH: 423 amino ació
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                                                                                                    TOPOLOGY: linear
MOLECULE TYPE: protein
US-07-757-0228-66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
US-07-757-022B-54
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                                                                                                                                                                                                                                                                                                                                                                                                                                            3.1%; Score 11; DB 4; Length 422; 100.0%; Pred. No. 0.031; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 66, Application US/07757022B
Patent No. 643342
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Clark, Stephen C.
APPLICANT: Turner, Katherine
APPLICANT: Turner, Katherine
APPLICANT: Turner, Katherine
APPLICANT: Hawick, Rodney M.;
TITLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SECUENCES: 143
CORRESPONDENCES: 143
ADDRESSEE: ADDRESSE:
ADDRESSEE: ADDRESSE:
STREET: ST. CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: MASSACANISETES
CUUNTRY: U.S.A.
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATCHIN RC-BOS/MS-DOS
SOFTWARE: PATCHIN RC-BOS/MS-DOS
SOFTWARE: PATCHIN ROMBER: US/07/757,022B
FILING DATE: 19910910
CLASSIFICATION NUMBER: US/07/757,022B
FILING APPLICATION NUMBER: US 07/643,502
FILING APPLICATION NUMBER: US 07/546,114
FILING APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-UNN-1990
PRIOR APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
PRIOR APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
ATTORNEY/AGENT INFORMATION:
MAME: CSETY, LUADIN
REGISTRATION NUMBER: 31,822
REFERENCE/DOCKET NUMBER: 31,822
REFERENCE/DOCKET NUMBER: GI 5190
TELECOMMUNICATION INFORMATION:
TELESPAX: (617)876-1170
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/390,901
FILING DATE: 08-AUG-1989
ATTORNEY/AGENT INFORMATION:
NAWE: CSETY, LUARM
REGISTRATION NUMBER: 31,822
REPERSINGE/DOCKET NUMBER: GI 5190
TELEPHONE: (617)876-1170
TELEPHONE: (617)876-1170
TELEPHONE: (617)876-1170
TELEPHONE: (617)876-5851
INFORMATION FOR SEQ ID NO: 68:
SEQUENCE CHARACTERISTICS:
LENGTH: 422 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 325 SSSSSSSST 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            127 SSSSSSSST 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Cambridge
STATE: Massachusetts
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
US-07-757-022B-68
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 11; Conserva
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0; Gaps

0; Indels

Mismatches	
0;	
Conservative	
11;	
Matches	

Search completed: February 19, 2004, 19:39:48 Job time : 22 secs

sequence 94, Appl Sequence 96, Appl Sequence 30, Appl Sequence 31, Appl Sequence 2074, Appl Sequence 2074, Appl Sequence 22, Appl Sequence 22, Appl Sequence 64, Appl Sequence 64, Appl Sequence 64, Appl Sequence 66, Appl Sequence 66, Appl Sequence 66, Appl Sequence 32421, Appl Sequence 32421, Appl Sequence 380, Appl Sequence 380, Appl Sequence 380, Appl Sequence 381, Appl Sequence 381, Appl Sequence 382, Appl Sequence 382, Appl Sequence 382, Appl Sequence 382, Appl Sequence 382, Appl Sequence 383, Appl Sequence 383, Appl Sequence 384, Appl Sequence 1943, Appl Sequence 1943, Appl Sequence 1943, Appl Sequence 7924, Appl Sequence 7924, Appl Sequence 7924, Appl Sequence 7924, Appl Sequence 7924, Appl Sequence 7924, Appl

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GENERAL INCORPATION:

GENERAL INCORPATION:

APPLICANT: Edinger, Shlowit R

APPLICANT: Edinger, Shlowit R

APPLICANT: Edinger, Shlowit R

APPLICANT: Edinger, Shlowit R

APPLICANT: Edinger, Marzel

APPLICANT: Marzel

APPLICANT: Rekuda, Ramesh

APPLICANT: Malgaru, Murzelidhara

APPLICANT: Padigaru, Murzelidhara

APPLICANT: Poligaru, Murzelidhara

APPLICANTON: No. US20040014038Alel GPCR-Like Proteins and Nucleic Acids Encodi

FILE REFRENCE: 21402-23-061

FILE REFRENCE: 2003-01-29

FRIOR APPLICANTON NUMBER: 60/259,552

FRIOR APPLICANTON NUMBER: 60/260,544

FRIOR APPLICANTON NUMBER: 60/260,544

FRIOR APPLICANTON NUMBER: 60/277,405

FRIOR PRING DATE: 2001-03-20

NUMBER OF SEQ ID NOS: 174

SEQ ID NO 34

LENGTH: 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 KINCTGIYLVHLAVSDLLFTVALPGRVVCYVLGSSWPFGKGLCRLTAFVLYTDTYGGVYL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MIKLGPYFTPPTKIKTKIKDLNVESQTVKIFLRSLFYTALLVFSALGNILALCLTCQKSR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 360; DB 12; Length 360; 100.0%; Pred. No. 0; ive 0; Mismatches 0; Indels 0;
4 US-10-124-557-92

4 US-10-124-557-132

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4 US-10-124-557-76

4 US-10-124-557-30

1 US-09-334-455-416

2 US-10-124-557-30

2 US-10-124-557-70

2 US-10-124-557-70

4 US-10-124-557-70

2 US-10-124-557-64

4 US-10-124-557-64

4 US-10-124-557-64

4 US-10-124-557-64

5 US-10-124-557-68

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US-10-032-585-7924
US-10-264-049-2651
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 34, Application US/10041615
Publication No. US20040014038A1
GENERAL INFORMATION:
         4444444448846 8484444444444444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 360; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
         US-10-041-615-34
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                                                                                                                                                   February 19, 2004, 19:37:21 ; Search time 40 Seconds (without alignments) 1884.441 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                    MIKLGPYFTPPTKIKIKD......SETPSITQARGSMFLAEHVV 360
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      / Cgm2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*
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/ cgm2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
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/ cgm2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
/ cgm2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
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/ cgm2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
/ cgm2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
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                           GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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US-10-041-615-109

US-10-017-16-1620

US-10-22-798-1294

US-09-801-944B-198

US-09-801-944B-198

US-09-764-864-1273

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US-09-764-864-1273

US-09-764-864-1273

US-09-764-864-1273

US-09-764-864-1273

US-09-764-864-1273

US-09-764-864-1273

US-09-764-864-1291

US-09-764-864-1291
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Gapop 60.0 , Gapext 60.0
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seq length: 200000000
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Perfect score:
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APPLICANT: SUMA, MAKIKO
APPLICANT: SUMA, MAKIKO
APPLICANT: ASA1, KIYOSHI
APPLICANT: ASA1, KIYOSHI
APPLICANT: ALYIAMA, YUTAKA
APPLICANT: ALYIAMA, YUTAKA
APPLICANT: ABURATANI, HIROYUKI
TITLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS
FILE REFERENCE: 084335/166
CURRENT APPLICATION NUMBER: US/10/292,798
PRIOR APPLICATION NUMBER: 10/017,161
PRIOR APPLICATION NUMBER: 10/017,161
PRIOR APPLICATION NUMBER: JP 2001-246789
PRIOR PILING DATE: 2001-06-18
PRIOR PLING DATE: 2001-06-18
PRIOR PLING DATE: 2010-06-18
PRIOR PLING DATE: 2010-06-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 30.6%; Score 110; DB 12; Length 323;
Best Local Similarity 100.0%; Pred. No. 8e-96;
Matches 110; Conservative 0; Mismatches 0; Indels 0; Gaps
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; Sequence 198, Application US/09801944B
; Lublication No. US20040014169A1
; GENERAL INFORMATION:
; APPLICANT: VOGGII, Gabriel
; APPLICANT: Wood, Linda S.
; TILLE OF INVEXTION: No. US20040014169Alel G Protein-Coupled Receptors
; CURRENT APPLICATION NUMBER: US/09/801,944B
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               CURRENT APPLICATION NUMBER: US/10/017,161
                                          CURRENT FILING DATE: 2002-12-18
PRIOR APPLICATION NUMBER: JP 2001/246789
PRIOR FILING DATE: 2001-06-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1294, Application US/10292798; Publication No. US20030235833A1; GENERAL INFORMATION:
                                                                                                                                               NUMBER OF SEQ ID NOS: 2430
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1620
LENGTH: 323
TYPE: PRT
TYPE: PRT
ORGANISM: Home sapiens
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; LENGTH: 323
: TYPE: PRT
; ORGANISM: Homo sapiens
US-10-292-798-1294
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Publication No. US20040014038A1
GENERAL INFORMATION. Stacle J
APPLICANT: Casman, Stacle J
APPLICANT: Edinger, Shlomit R
APPLICANT: Edinger, Shlomit R
APPLICANT: Smitheon, Glennda
APPLICANT: Return Rares
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APPLICANTON: NOWBER: 06/259,552
PRIOR APPLICATION NUMBER: 60/259,552
PRIOR PLING DATE: 2001-01-09
PRIOR FILING DATE: 2001-01-09
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                                                                                                                                                               181 MEYSSMESVLGLPLMVLVAFAIGFCGPVGIILSCYMKITWKLCSTAREDPVTSRKGRHWR 240
                                                                                                                                                                                                                                                                                                                                                                                                                                               301 TPIIYPFASTHYRKWILGILKLKGSSSSSSSSSSTPGKASSETPSITQARGSMFLAEHVV 360
                                                                                                                    121 MACVSVDHYPAVVCAHWGPRLRTAGRARLVCVAIWTLVLLQTMPLLLMPMTKPLVGKLAC 180
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APPLICANT: ASAI, KIYOSHI
APPLICANT: AKIYAVA, YUTAKA
APPLICANT: ABURATANI, HIROYUKI
ITILE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTORS
FILE REFERENCE: 084335/0152
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; Publication No. US20030143668A1
; GENERAL INFORMATION:
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US-10-041-615-109
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US-10-041-615-109
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Hewick, Rodney M.
Gebner, Thomas G.
TITLE OF INVENTION: Megakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
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ZIP: 02140

ZIP: 02140

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Ver

SOFTWARE: PatentIn Release #1.0, Ver

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/124,557

FILING DATE: 16-Apr-2002

CLASSIFICATION: CUNCOWN>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/643,502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14.2%; Scc... 100.0%; Pred. No. ... 0; Mismatches
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ADDRESSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 18-JAN-1991
PAPLICATION NUMBER: US 07/546,114
FILING DATE: 29-JUN-1990
APPLICATION NUMBER: US 07/457,196
                                                                                                                                                                     60/188,064
                                                                                                                                                                                                                                                                                  60/213,861
                                                                                                                                                                                                                                                                                                                                                     60/194,344
         PRIOR FILING DATE: 2000-07-11
PRIOR APPLICATION NUMBER: 60/218, PRIOR APPLICATION NUMBER: 60/18, PRIOR APPLICATION NUMBER: 60/18, PRIOR FILING DATE: 2000-03-03
PRIOR FILING DATE: 2000-03-03
PRIOR FILING DATE: 2000-03-03
PRIOR APPLICATION NUMBER: 60/18, PRIOR APPLICATION NUMBER: 60/213, PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-07-14
NUMBER OF SEQ ID NOS: 184
SOFTWARE: PATENTY DATE: 2000-07-14
NUMBER OF SEQ ID NOS: 184
SSEQ ID NO 95
LENGTH: 177
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CORGANISM: Homo sapiens
US-09-791-932-95
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Best Local Similarity
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Parcdi, Luis A.
Hiebsch, Ronald R.
Lind, Peter
Kayres, Paul S.
Ruff, Valerie
Huff, Rita M.
Wood, Linda S.
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PRIOR PILING DATE: 2000-03-08
PRIOR APPLICATION NUMBER: 60/187,715
PRIOR APPLICATION NUMBER: 60/187,715
PRIOR APPLICATION NUMBER: 60/187,715
PRIOR PILING DATE: 2000-03-08
PRIOR FILING DATE: 2000-03-08
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PRIOR PELING DA
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APPLICANT: Kaytes, Paul S.
APPLICANT: Ruff, Valerie
APPLICANT: Huff, Valerie
APPLICANT: Huff, Rita M.
APPLICANT: Wood, Linda S.
TITLE OF INVENTION: No. US20030003451A1e1
FILE REPERENCE: 00325.US1
CURRENT APPLICATION NUMBER: US/09/791,932
CURRENT FILING DATE: 2001-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/184,305
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Publication No. US20030003451A1
GENERAL INFORMATION:
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Best Local Similarity 100.
Matches 70; Conservative
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PPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          293 LMNMNCGITP 302
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo sapiens
US-09-801-944B-198
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TYPE: PRT

CREATURE:

OTHER INFORMATION: MAP TO ALIGIT47.1

OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 5.5

OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 4.5

OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 4.6

OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 4.7

OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 4.7

OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 4.7

OTHER INFORMATION: EXPRESSED IN HEARY, SIGNAL = 4.5

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 4.5

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 5.5

OTHER INFORMATION: SYPERSED IN HELA, SIGNAL = 5.5

OTHER INFORMATION: SYPERSED IN HELA, SIGNAL = 5.5

OTHER INFORMATION: SYPERSED IN HELA, SIGNAL = 5.5

OTHER INFORMATION: SYPERSED IN HELA, SIGNAL = 5.5

OTHER INFORMATION: SYPERSED IN HELA, SIGNAL = 5.5

OTHER INFORMATION: SYPERSED IN HELA, SIGNAL = 5.5

OTHER INFORMATION: SYPERSED IN HELA, SIGNAL = 5.5
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US-09-764-812
Sequence 812, Application US/09764864
Sequence 812, Application US/09764864
Setent No. US20020132753A1
GENERAL INFORMATION:
TITLE OF INVENTION: Wuleic Acids, Proteins, and Antibodies
FILE REFERENCE: PTZ23
CURRENT FILING DATE: 2001-01-17
Prior application data removed - consult PALM or file wrapper
NUMBER OF SEQ ID NOS: 1792
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 812
LENGTH: 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.1%; Score 11; DB 9; Length 104; Best Local Similarity 100.0%; Pred. No. 0.023; Matches 11; Conservative 0; Mismatches 0; Indels
                                                   FRIOR FILLING DAILS: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/USO1/00666
PRIOR FILING DAIE: 2001-01-30
PRIOR FILING DAIE: 2001-01-30
PRIOR FILING DAIE: 2001-01-30
PRIOR PELING DAIE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00669
PRIOR APPLICATION NUMBER: PCT/USO1/00669
PRIOR APPLICATION NUMBER: PCT/USO1/00669
PRIOR PILING DAIE: 2001-01-30
PRIOR PILING DAIE: 2001-01-30
PRIOR PILING DAIE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00663
PRIOR APPLICATION NUMBER: PCT/USO1/00663
PRIOR APPLICATION NUMBER: PCT/USO1/00663
PRIOR APPLICATION NUMBER: PCT/USO1/00661
PRIOR PILING DAIE: 2001-01-30
PRIOR PILING DAIE: 2001-01-30
PRIOR PLING DAIE: 2001-01-30
PRIOR PLING DAIE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/USO1/00670
PRIOR PLING DAIE: 2001-01-30
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PRIOR PILING DAIE: 2000-06-30
PRIOR PILING DAIE: 2001-01-29
NUMBER OF SEO ID NOS: 49117
SEO ID NO 41522
PLENGFI:: 1044
PURPLEMENT AND PURPLEMENT DATE: 2001-01-29
NUMBER: ADDIMENT DATE: 2001-01-30
PRIOR PILING DAIE: 2001-01-29
NUMBER: ADDIMENT DATE: 2001-01-29
NUMBER: ADDIMENT DATE: 2001-01-29
NUMBER: ADDIMENT DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-30
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Sequence 41522, Application US/09864761

Sequence 41522, Application US/09864761

Sequence 41522, Application US/09864761

Sequence 41522, Application US/09864761

Sequence 41522, Application US/09864761

Sequence 41522, Application Secure 200.

Sequence 41522, Application G.

PREMEAL INFORMATION: Barron G.

APPLICANT: Ranh, David R.

APPLICANT: Ranh, Wensheng

TITLE OF INVENTION: HINAM GENDE EXPRESSION ANALYSIS BY MICROARRAY

TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY

TITLE OF INVENTION HOWBER: US 60/180, 312

PRIOR FILING DATE: 2000-02-04

PRIOR FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-06-08-03

PRIOR FILING DATE: 2000-06-08-03

PRIOR FILING DATE: 2000-06-08

PRIOR FILING DATE: 2000-01-0-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1273, Application US/09764864
Patent No. US2002012753A1
GENUEAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTON: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PRZ23
CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT FILING DATE: 2001-01-17
Prior application data removed - consult PALM or file wrapper
NUMBER OF SEQ ID NOS: 1792
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1273
LENGTH: 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.1%; Score 11; DB 14; Length 43; 100.0%; Pred. No. 0.011; ive 0; Mismatches 0; Indels
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REGISTRATION NUMBER: 31,822
REFERENCE/DOCKET NUMBER: GI 5190
                                                                                                                                                                                                                                                                                            TYPE: amino acide
TYPE: amino acide
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-10-124-557-12
                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)876-1170
TELEFAX: (617)876-1170
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 43 amino acids
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Best Local Similarity 100.
Matches 11; Conservative
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Best Local Similarity 100.
Matches 11; Conservative
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -09-764-864-1273
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MIDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/124,557
FILING DATE: 16-Apr-2002
CLASSIFICATION: «Unknown»
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 90, Application US/10124557
Publication No. US20020137894A1
GENERAL INFORMATION:
APPLICANT: Turner, Katherine
Clark, Stephen C.
Jacobs, Kenneth
Hewick, Rodney W.
Gesner, Thomas G.
TITLE OF INVENTION: Magakaryocyte Stimulating Factors
NUMBER OF SEQUENCES: 143
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/643,502
FILING DATE: 18-JAN-1991
APPLICATION NUMBER: US 07/546,114
FILING DATE: 29-UN-1990
APPLICATION NUMBER: US 07/457,196
FILING DATE: 29-DEC-1989
APPLICATION NUMBER: US 07/390,901
FILING DATE: 08-AUG-1889
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 90:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Cserr, Luann
REGISTRATION NUMBER: 31,822
REFERENCE/DOCKET NUMBER: GI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
  ; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 4
; LENGTH: 187
; TYPE: PRT
TYPE: PRT
US-10-148-687-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Cambridge
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
                                                                                                                                                                                                                                                                                              324 GSSSSSSSS 334
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                                                                                                                                                                                                                                                                                                                                                   6 GSSSSSSSS 16
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3.1%; Score 11; DB 10; Length 134;
Best Local Similarity 100.0%; Pred. No. 0.029;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                             Query Match
3.1%; Score 11; DB 10; Length 112;
Best Local Similarity 100.0%; Pred. No. 0.025;
Matches 11; Conservative 0; Mismatches 0; Indels
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Publication No. US20030185836A1
GENERAL INFORMATION:
APPLICANT: SLADE, Martin Basil
APPLICANT: SLADE, Martin Basil
APPLICANT: WILLIAMS, Keith Leslie
APPLICANT: MOOLEY, Andrew Arthur
APPLICANT: MOOLEY, Andrew Arthur
FILE OF INVENTION: Cryptosporidium sporozoite antigens
FILE REFERENCE: 047763-5019-US
CURRENT APPLICATION NUMBER: US/10/148,687
CURRENT FILING DATE: 2002-05-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: YOKOI, HARUHIKO
APPLICANT: TATE:SH, NAOKO
APPLICANT: SENOH, AKHIRO
APPLICANT: SENOH, AKHIRO
APPLICANT: SENOH, AKHIRO
APPLICANT: OZAKI, AKAIO
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REPERENCE: 249-125
CURRENT APPLICATION NUMBER: US/09/738,626
CURRENT APPLICATION NUMBER: US/09/738,626
PRIOR PILING DATE: 1999-12-16
PRIOR PILING DATE: 1999-12-16
PRIOR PILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-04-07
PRIOR FILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-04-07
SOFTWARE: PECENTIN VOET: 3.0
SOFTWARE: PECENTIN VOET: 3.0
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PRIOR APPLICATION NUMBER: PCT/AU00/01492
PRIOR FILING DATE: 2000-12-01
PRIOR FILING DATE: 1999-12-01
PRIOR FILING DATE: 1999-12-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Corynebacterium glutamicum
US-09-738-626-5042
                                                                                                                                                                                                                                                                                                                                        S-09-738-626-5042
Sequence 5042, Application US/09738626
Publication No. US20020197605A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MIZOGUCHI, HIROSHI
ANDO, SEIKO
HAYASHI, MIKIRO
OCHIAI, KEIKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: NAKAGAWA, SATOSHI
                                                                                                                                                                                    324 GSSSSSSSS 334
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; ORGANISM: Homo sapiens
US-09-764-864-812
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325 SSSSSSSSST 335 ||||||||||| 168 SSSSSSSST 178

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NAME/KEX: SITE
1 NAME/KEX: (187)
1 LOCATION: (187)
2 OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-764-864-1291
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US-09-764-836
Sequence 836, Application US/09764864
Sequence 836, Application US/09764864
Sequence 836, Application US/09764864
Sequence B36, Application US/09764864
SERENT INFORMATION:
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REPRENCE: PIZ23
CURRENT ILING-DATE: 2001-01-17
CURRENT ELING-DATE: 2001-01-17
Prior application data removed - consult PALM or file wrapper
NUMBER OF SEQ ID NOS: 1792
SEQ ID NO 836
LENGTH: 201
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RESULT 14
US-09-764-864-1291
US-09-764-864-1291
Sequence 1291, Application US/09764864
Factor No. US2002013273A1
Factor No. US2002013273A1
FIGURARY INFORMATION:
FILE REFERENCE: PT23
CURRENT APPLICATION NUMBER: US/09/764,864
CURRENT FILING DATE: 2001-01-17
FILO OF SEQ ID NOS: 1792
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1291
LENGHY: 199
TYPE: PRT
PURENT HOMO Sapiens
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; ORGANISM: Homó sapiens
US-09-764-864-836
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Search completed: February 19, 2004, 19:40:41 Job time : 41 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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- protein search, using sw model OM protein February 19, 2004, 19:35:36; Search time 20 Seconds (without alignments) 1731.036 Million cell updates/sec

Run on:

US-10-041-615-34 360 1 MIKLGPYFTPPTKIKTKIKD......SETPSITQARGSMFLAEHVV 360 Title: Perfect score:

Sequence:

Scoring table:

283308 seqs, 96168682 residues OLIGO Gapop 60.0 , Gapext 60.0

Searched:

Total number of hits satisfying chosen parameters: 10 Word size :

218

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

Database :

PIR 76:*
1: pir1:*
2: pir2:*
3: pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

trfA protein - sli ecdysone-induced p		vitellogenin precu vitellogenin I pre ht-en protein - le	protein T16B5.1 [i glycine-rich prote probable cytochrom	hypothetical prote- dehydrin - upland embryonic abundant hypothetical prote
T14004 B34598	H86557 E72067 C81601	S28974 T29088 S13623	C86242 B85356 T12208	S69871 T09876 S04042 T23179
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1390	1723 1723 1723	1823 1912 98	105 107 109	125 135 145 149
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ALIGNMENTS

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actor Oct-2B o		
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transcription	A42098	RESULT 1

Cispecies: Homo sapiens (man)
Cispecies: Homo sapiens (man)
Cispecies: Homo sapiens (man)
Cispecies: Homo sapiens (man)
Cispecies: Homo sapiens (man)
Cispecies: 11-Dec-1993 #text_change 15-Oct-1999
Cispecies: 13-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 15-Oct-1999
Cispecies: 13-Dec-1993 #sequence_revision domains in Oct-1 and Oct-2 direct differential act A:Tanaka, M: Lai, J.S.767, 1992
Cell 68, 755-767, 1992
Cell 68, 755-767, 1992
Cell 68, 755-767, 1992
A:Reference number: A42098; MUD:92154688; PMID:1739980
A;Reference number: A42098
A;Reference number: A42098
A;Accession: A42098
A;Accession: A42098
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A;Accession: A42098
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A;Accession: A42098
C;Superfamily: unassigned homeobox proteins; homeobox homology
C;Reywords: DNA binding; homeobox; nucleus; transcription regulation

ö Gaps ô Query Match
3.1%; Score 11; DB 2; Length 135;
Best Local Similarity 100.0%; Pred. No. 0.0042;
Matches 11; Conservative 0; Mismatches 0; Indels

325 SSSSSSSSST 335 103 SSSSSSSSST 113 ઠે 셤

Glycine-rich protein [imported] - Arabidopsis thaliana (Cispecies: Arabidopsis thaliana (mouse-ear cress) (Cispecies: Arabidopsis thaliana (mouse-ear cress) (Cispecies: Arabidopsis thaliana (mouse-ear cress) (Cispecies: 16-Peb-2001 #sequence_revision 16-Feb-2001 #text_change 02-Mar-2001 (Cispacesion: C88356 (Cispacesion: C88356 (Cispace) (Cispacesion: C88356 (Cispace) (Cisp

A, Gene: AT4g30460

A,Map position: 4 C,Superfamily: glycine-rich cell wall structural protein 1

. 0 Query Match 3.1%; Score 11; DB 2; Length 162; Best Local Similarity 100.0%; Pred. No. 0.005; Matches 11; Conservative 0; Mismatches 0; Indels

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Gaps

324 GSSSSSSSSS 334

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A;Cross-references: GB:119248
R;Clark, S.G.; Chisholm, A.D.; Horvitz, H.R.
Cell 74, 43-55, 1993
A;Title: Control of cell fates in the central body region of Caenorhabditis elegans by the A;Reference number: A40720; MUID:93327430; PMID:8101475
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C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Day-1994 #sequence_revision 12-May-1994 #text_change 17-Nov-2000
C;Date: 12-May-1994 #sequence_revision 12-May-1994 #text_change 17-Nov-2000
R;Mang, B.B.; Mueller-Immergluck, M.M.; Austin, J.; Robinson, N.T.; Chisholm, A.; Kenyor.
Cell 74, 29-42, 1993
A;Title: A homeotic gene cluster patterns the anteroposterior body axis of Caenorhabditi
A;Reference number: A40722; MUID:93327429; PMID:8101474
A;Accession: B40722
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-288 *WANA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Accession: A35419
R;Bellavite, P.; Bazzoni, F.; Cassatella, M.A.; Hunter, K.J.; Bannister, J.V.
Biochem. Biophys. Res. Commun. 170, 915-922, 1990
A;Title: Isolation and characterization of a cDNA clone for a novel serine-rich neutroph A;Reference number: A35419; MUID:90343818; PMID:1696479
A;Accession: A35419
A,Residues: 1-262 <LUC>
A;Cross-references: EMBL:AL035259; PIDN:CAA22863.1; GSPDB:GN00068; SPDB:SPCC1322.10
A;Experimental source: strain 972h-; cosmid c1322
C;Genetics:
A;Gene: SPDB:SPCC1322.10
A;Gene: SPDB:SPCC1322.10
A;Map position: 3
C;Superfamily: serine-rich protein
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C;Species: Sus scrofa domestica (domestic pig)
C;Date: 18-Jan-1991 #sequence_revision 18-Jan-1991 #text_change 05-Nov-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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A,Cross-references: GB:L19639; NID:g304331; PIDN:AAC37168.1; PID:g304332
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100.0%; Pred. No. 0.0077;
iive 0; Mismatches 0; Indels
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Best Local Similarity 100.
Matches 11; Conservative
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Matches 11; Conservative
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S59537
heat shock transcription factor HSF21 - soybean (fragment)
C,Species: Glycine max (soybean)
C,Species: Glycine max (soybean)
C,Species: Glycine max (soybean)
C,Date: 15-Feb-1996 #sequence_revision 01-Mar-1996 #text_change 02-Sep-2000
C;Accession: S59537, S52303
R;Carnecka-Verner, E.; Yuan, C.X.; Fox, P.C.; Gurley, W.B.
R;Carnecka-Verner, E.; Yuan, C.X.; Fox, P.C.; Gurley, W.B.
Plant Mol. Biol. 29, 37-51, 1995
A;Title: Isolation and characterization of six heat shock transcription factor cDNA clon A;Reference number: S59537; MUID:96017612; PMID:7579166
A;Reference number: S59537; MUID:96017612; PMID:7579166
A;Reference number: S59537; MUID:96017612; PMID:7579166
A;Reference number: S59537
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 20.0ct-2000 #sequence_revision 20-0ct-2000 #text_change 20-0ct-2000
C;Accession: T51989
B;Fujimoto, S:Y: Ohta, M.; Usui, A.; Shinshi, H.; Ohme-Takagi, M.
B;Auticell 12, 393-404, 2000
A;Title: Arabidopsis ethylene responsive element binding factors act as transcriptional A;Reference number: 225893
A;Accession: T51889
A;Accession: T51889
A;Accession: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-243 <FUJ>A;Molecule type: mRNA
A;Residues: 1-243 <FUJ>A;Accession: Teferences: EMBL:AB008104; PIDN:BAA32419.1
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G/Species: Schizosaccharomyces pombe
G/Species: Schizosaccharomyces pombe
G/Bacies: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 17-Mar-2000
C/Accession: T40941
R/Lucas, M., Galilardin, C.; Lyne, M.; Rajandream, M.A.; Barrell, B.G.
A;Reference number: Z21959
A;Reference number: Z21959
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Recule type: DNA
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Length 192;

0; Indels

3.1%; Score 11; DB 2; I Local Similarity 100.0%; Pred. No. 0.0058; les 11; Conservative 0; Mismatches 0;

Query Match Best Local S Matches 11

8 셤 Length 243;

Query Match
3.1%; Score 11; DB 2; Length 243
Best Local Similarity 100.0%; Pred. No. 0.0072;
Matches 11; Conservative 0; Mismatches 0; Indels

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hypothetical protein BH0055 [imported] - Bacillus halodurans (strain C-125)
C;Species: Bacillus halodurans
C;Species: Bacillus halodurans
C;Species: Bacillus halodurans
C;Accession (38,656
R;Takani, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; Hirs Nuncleic Acids Res. 28, 4317-4311, 2000
A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A;Accession: G83556
A;Accession: G83556
A;Accession: G83556
A;Accession: G83556
A;Accession: G83556
A;Accession: G83556
A;Accession: G83556
A;Accession: G83556
A;Accession: G83556
C;Genetics: 1-416 <STO>
A;Accession: G83556
C;Genetics: C-125
C;Genetics: C-125
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AjTitle: Complete genome sequence of Pseudomonas aeruginosa PA01, an opportunistic patho AjReference number: A82950; MUID:20437337; PMID:10984043

AjAccession: E83465

AjAccession: Preliminary

AjAccule type: DNA

AjResidues: 1-447 <STO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conserved hypothetical protein PA1451 [imported] - Pseudomonas aeruginosa (strain PA01)
C;Species: Pseudomonas aeruginosa
C;Species: Pseudomonas aeruginosa
C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 31-Dec-2000
C;Accession: E83465
R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; B: adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim. Nature 406, 959-964, 2000
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C;Species: Kluyveromyces marxianus var. lactis, Candida sphaerica
C;Dacession: T45525
R;Bao, W.G.; Fukuhara, H.
Submitted to the RMBL Data Library, July 1999
A;Description: The ubiquitin-encoding genes of Kluyveromyces lactis.
A;Reference number: Z23000
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Reference bunA
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100.0%; Pred. No. 0.012;
ive 0; Mismatches 0; Indels
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100.0%; Pred. No. 0.012;
tive 0; Mismatches 0; Indels
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Best Local Similarity 100.
Matches 11; Conservative
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Best Local Similarity
Matches 11, Conserva
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C; Species: Arabidopsis thaliana (mouse-ear cress)
C; Species: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
C; Accession: G96544
R; Theologis, A.; Ecker, J.R.; Falm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso, Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.B.; Creasy, T.H.; Dewar, K.; ansen, M.F.; Hughes, B.; Hulzar, L.
Nature 408, 816-820, 2000
A; Athores: Hunter, J.L.; J.H.; Z.X.; Liu, Z.A.; Luros, J.S.; Maykin, B.; Kim, C.C., J., J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marziali, Rizzo, M.; Rooney, T.; Scwhartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, Ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venner, J.C.; Davis, R.W.
A; Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A; Accession: G9654
A; Accession: G9654
A; Accession: G9654
A; Anolecule type: DNA
A; Molecule type: DNA
A; Reference commober: GB: ABC005173; NID:g11094707; PIDN:AAG29643.1; GSPDB:GN00141
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100.0%; Pred. No. 0.0088;
iive 0; Mismatches 0; Indels
                                              Indels
0.0083;
                                                                                                                                                                                                                                                                       hypothetical protein T209.60 - Arabidopsis thaliana
                   Pred. No. 0.(
Mismatches
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C;Superfamily: RING finger homology
F;165-215/Domain: RING finger homology <RRN>
                Best Local Similarity 100.0%; Pr
Matches 11; Conservative 0;
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Best Local Similarity 100.
Matches 11; Conservative
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                                                                                                                                             SSSSSSSST 69
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A,Map position: 1
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Matches 1
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Gaps

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Length 503; 0; Indels

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R;Nakamura, T.; Alder, H.; Gu, Y.; Prasad, R.; Canaani, O.; Kamada, N.; Gale, R.P.; Lang
Proc. Natl. Acad. Sci. U.S.A. 90, 4631-4635, 1993
A;Title: Genes on chromosomes 4, 9, and 19 involved in 11q23 abnormalities in acute leuk
A;Reference number: A47440; MUID:93281633; PMID:8506309
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Species: Homo sapiens (man)
Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 29-Aug-1997
Accession: 139411
A,Gene: SGD:WSC2
A,Cross-references: SGD:S0005227; MIPS:YNL283c
A,Map position: 14L
C;Keywords: transmembrane protein
F;330-346/Domain: transmembrane #status predicted <TWM>
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100.0%; Pred. No. 0.015;
cive 0; Mismatches 0
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100.0%; Pred. No. 0.014;
tive 0; Mismatches C
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Job time : 23 secs
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A,Cross-references: GDB:138172; OMIM:159558
A,Map position: 9p22-9p22
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Best Local Similarity 100.
Matches 11; Conservative
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Matches 11; Conservative
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A; Residues: 1-568 <NAK>
                                                                                                                                                                                                                                                                                                                                                                                                                                             AF-9 protein - human
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N.Alternate names: hypothetical protein N0583

N.Alternate names: hypothetical protein N0583

N.Alternate names: hypothetical protein N0583

C.Accession: 53257

#.Sequence_revision 03-May-1996 #text_change 06-Feb-1998

C.Accession: 53257

#.Seferon: 53245

A.Referonce number: 53245

A.Referonce number: 53245

A.Residues: 1-503 < MES>

A.Residues: 1-503 < MES>

A.Residues: 1-503 < MES>

A.Rorosas-references: EMBL: Z71559; NID:g1302356; PID:e239724; PID:g1302357; MIPS:YNL283c C;Genetics:
                                                                                                                                                                                                                                                                                                                                                          930339
UTR2 protein - yeast (Saccharomyces cerevisiae)
UTR2 protein - yeast (Saccharomyces cerevisiae)
USAlernae names: protein YEL040w
C;Species: Saccharomyces cerevisiae
C;Dates: 28-May-1993 #sequence_revision 28-May-1993 #text_change 06-Feb-1998
C;Accession: $30639; $505064; $38545
R;Mulligan, J.T.; Dietrich, F.S.; Hennessey, K.M.; Sehl, P.; Komp, C.; Wei, Y.; Taylor, Submitted to the EMBL Data Library, February 1993
A;Reference number: $30812
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A; Residues: 1-467 <MUL>
A; Across-references: GB:U18779; EMBL:L10830; NID:g603625; PID:g603639
B; Poletrich, F.S.
submitted to the EMBL Data Library, December 1994
A; Pescription: The sequence of S. cerevisiae cosmids 8199, 8334, and 9871.
A; Reference number: $50491
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                                                                                                     Score 11; DB 2; Length 447;
Pred. No. 0.012;
0; Mismatches 0; Indels
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100.0%; Pred. No. 0.013;
iive 0; Mismatches 0; Indels
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A;Molecule type: DNA
A;Residues: 121-129, VV, 131-290, RV, 292-353, CV, 355-467 <MEL>
A;Cross-references: BMBL:S66130; NID:g430829; PID:g430830
C;Genetics:
                                                                                        3.1%; Scott 100.0%; Pred. No. cotton 100.0%; Pred. No. cotton 100.0%; Mismatches
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A;Map position: 5L
  A, Experimental source: strain PAO1 C, Genetics: A, Gene: PA1451
                                                                                                     Query Match 3.1
Best Local Similarity 100.
Matches 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Structural analysis of Arabidopsis thaliana chromosome 5. X. Sequence features of the regions of 3,076,755 bp covered by sixty Pl and TAC clones.";
-1. FURCHION: TRANSCRIPTION FACTOR THAT BINDS TO THE GCC-BOX PATHOGENESIS-RELATED PROMOTER BLEANT.
-1. SUBCELLULAR LOCATION: Muclear (Probable).
-1. SIMILARITY: Contains 1 AP2/ERF domain.
                                                                                                                                                                                                                                                                                                                 30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
28-FBB-2003 (Rel. 41, Last annotation update)
Ethylene responsive element binding factor 2 (AtERF2).
ERP2 OR ERP-2 OR AT5G47220 OR MQL5.7.
Arabidopsis thallana (Mouse-ear cress).
Eukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnollophyta; eudicotyledons; core eudicots; Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       [1] — SEQUENCE FROM N.A. MEDULINE=20181733; PubMed=10715325; Pubmed=20181733; PubMed=10715325; Pubmed=20181733; Pubmed=10715325; Pubmed S.Y., Ohta M., Usui A., Shinshi H., Ohme-Takagi M.; Harabidopsis ethylene responsive element binding factors act as transcriptional activators or repressors of GCC box mediated gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN=cv. Columbia;
SEDLINE=20181125; PubMed=10718197;
Sato S., Nakamura Y., Kaneko T., Katoh T., Asamizu E., Kotani H.,
Tabata S.;
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Pfam; PF00847; AP2-domain; 1.
ProDom; PD001423; TF_BRF; 1.
SMART; SM00380; AP2; 1.
Transcription regulation; DNA-binding; Nuclear protein.
DOMAIN
23
POLY-GLY.
                                                                                                                                                                                                                                                                                       243 AA
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                                                                                                    NK61_HUMAN
CAR4_RHINI
HM39_CAEEL
SR40_YEAST
E2F4_HUMAN
                                           CATRO
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TRANSFAC; T04634; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 expression.";
Plant Cell 12:393-404(2000)
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(c) 1993 - 2004 Compug
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SMART; SM00389; HOX;
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                                                                                                                                                                                01-FEB-1994 (Rel. 28, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
01-FEB-2003 (Rel. 41, Last annotation update)
Homeobox protein lin-39.
LIN-39 OR CEH-15 OR C07H6.7.
Caenorhabditis elegans.
Ebkaryota; Metazoa; Nematoda; Chromadorea; Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                             homeotic gene cluster patterns the anteroposterior body axis of C.
                                                                     Gaps
                                                                                                                                                                                                                                                                                                                       STRAIN=Bristol N2;
MEDLINE=93327430; PubMed=8101475;
MIDLINE=93327430; PubMed=8101475;
MIDLINE=93327430; Chisholm A.D., Horvitz H.R.;
"Control of cell fates in the central body region of C. elegans by the homeobox gene lin-39.";
Cell 74:43-55(1993).
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MEDLINE=9327429; PubMed=8101474;
Wang B.B., Mueller-Tammergluck M.M., Austin J., Robinson N.T.,
Chisholm A.D., Kenyon C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=Bristol N2;
Macri C., Vaudin M.;
Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: COUTROLS THE MICRATION OF NEUROBLASTS AND THE SUBSEQUENT MID-BODY REGION-SPECIFIC DEVELOPMENT.
-!- SUBCELLULAR LOCATION: Nuclear (Probable).
-!- SIMILARITY: BELONGS TO THE ANTP HOMEOBOX FAMILY.
"DEFORMED" SUBFAMILY.
                                           3.1%; Score 11; DB 1; Length 243; 100.0%; Pred. No. 0.0045; ive 0; Mismatches 0; Indels
              POLY-SER,
C9A4C9791249B5D4 CRC64;
                                                                                                                                                                        253 AA.
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WormPep; CO7146;7; CE03975.
TRANSPAC; T03169; ...
InterPro; IPR001827; Antennapedia.
InterPro; IPR001356; Homeobox.
Pfan; PP00046; homeobox; 1.
PRINTS; PR00025; ANTENNAPEDIA.
PRINTS; PR00024; HOMEOBOX.
  AP2/ERF.
                        243 AA; 26797 MW;
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EMBL; AC006605; AAK85445.1;
PIR; B40722; B40722.
                                             Query Match
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                        STANDARD;
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ID_LI39_C
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstationthe European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Melnick L., Sherman F.;
"The gene clusters ARC and COR on chromosomes 5 and 10, respectively,
of Saccharomyces cerevisiae share a common ancestry.";
J. Mol. Biol. 233:372-388(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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Bukaryota; Fungi; Ascomycota; Saccharomycoties; Saccharomycetales; Saccharomycetales; Saccharomycetales; Saccharomycetales; Saccharomyces.
Prodom; rucv...

Broatts, Sanoabs; HOX; 1.

PROSTIE; PS00027; HOMEOBOX 2; 1.

PROSTIE; PS00011; HOMEOBOX 2; 1.

PROSTIE; PS00012; ANTENNAPELA; 1.

HOMEOBOX; DNA-binding; Nuclear protein; Developmental protein.

POMAIN 121 129 FOLY ASP.

DOMAIN 121 129 ANTE-TYPE HEXAPEPTIDE.

SITE 148 153 HOMEOBOX.

PRO-RIGHAL PROFESTION.
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                                                                                                                                                                                                                                                                                                                                                                                                           h 3.1%; Score 11; DB 1; Length 253; Similarity 100.0%; Pred. No. 0.0047; L1; Conservative 0; Mismatches 0; Indels
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01-0CT-1994 (Rel. 30, Last sequence update)
115-SEP-2003 (Rel. 42, Last annotation update)
URZ protein (Unknown transcript 2 protein).
UTRZ OR YELO40W OR SYGP-ORF18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nature 387:78-81(1997).
-!- SIMILARITY: SOME, TO YEAST YGR189C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL, S65964; AAD13975.1; -.
EMBL, S66130; AAB28444.1; -.
EMBL, U18779; AAB65002.1; ALT_INIT.
BIR, S30839; S30839.
HSSP, P23904; IAJO.
SQD; S0000766; UTR2.
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STRAIN=S288c / AB972;
PubMed=9169868;
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P32623;
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Length 503;

Score 11; DB 1; Pred. No. 0.0085;

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Best Local Similarity 100.
Matches 11; Conservative
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013318;
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                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its mose by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
Messenguy F., Dubois E., Vierendeels F., Scherens B., Pierard A.,
Glansdorff N.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
01-0CT-1996 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
cell wall integrity and stress response component 2 precursor.
WSC2 OR YNL283C OR N0583.
Saccharomyces cerevisiae (Baker's yeast)
Eukaryota; Fungi; Ascomycota; Saccharomyceties;
Saccharomycetales; Saccharomycetaceae; Saccharomycetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (POTENTIAL)
(POTENTIAL)
(POTENTIAL)
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GO; GO:0004888; F:transmembrane receptor activity; IGI.
GO; GO:0000407; P:cell wall organization and biogenesis; IGI.
GO; GO:0009408; P:response to heat; IGI.
GO; GO:0007266; P:Rho protein signal transduction; IGI.
INterPro; IRR022889; WSC.
Pfam; PF01822; WSC; 1.
SWART; SM00321; WSC; 1.
                                                                                                                                                                                                                                                                                                                3.1%; Score 11; DB 1; Length 347; 100.0%; Pred. No. 0.0062; ive 0; Mismatches 0; Indels
   GO; GO:0009277; C:cell wall (sensu Fungi); IDA.
GO; GO:0000144; C:septin ring (sensu Saccharomyces); IDA.
InterPro; ISR000757; Glycchydro_16.
Pfam; PF00722; Glycchydro_16; 1.
DOMAIN 234 322 SER-RICH.
DOMAIN 234 POLY-SER.
CONFLICT 10 10 L - V (IN REF. 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glansdorff N.;
Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases.
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N-LINKED (GLCNAC. . .) (PC
N-LINKED (GLCNAC. . .) (PC
F2392A73C5CBAB50 CRC64;
                                                                                                                                                POLY-SER.

L -> V (IN REF. 1).

A -> R (IN REF. 1).

S -> C (IN REF. 1).

; IE8AFB862C4BB328 CRC64;
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N-LINKED (GLCNAC.
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1 23 POTENTIAL.
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                                                                                                                                                                                                                                                                  36692 MW;
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PIR; S63257; S63257.
SGD; S0005227; WSC2.
                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.
Marches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                           325 SSSSSSSST 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                274 SSSSSSSST 284
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                                                                                                                                                                                                                                                                     347 AA;
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269
10
171
234
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P53832;
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CARBOHYD
SEQUENCE
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CARBOHYD
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CONFLICT
SEQUENCE
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                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MON. Cell. Biol. 17:5960-5967(1997).

-i- FUNCTION: REQUIRED FOR AFICAL CELL GROWTH AND FLAYS AN ESSENTIAL ROLE IN MORPHOGENESIS. MAY BE INTEGRAL TO THE PATHOGENIC ABILITY OF THE ORGANISM (BY SIMILARITY).

-i- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PURENTIAL:
PURENOVED IN MATURE FORM (POTENTIAL).
SCH-KICH.
POLY-SER.
N-LINKED (GLCNAC. .) (POTENTIAL).
N-LINKED (GLCNAC. .) (POTENTIAL).
N-LINKED (GLCNAC. .) (POTENTIAL).
N-LINKED (GLCNAC. .) (POTENTIAL).
N-LINKED (GLCNAC. .) (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Candida.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -i- INDUCTION: REPRESSED AT PH VALUES ABOVE 6 AND PROGRESSIVELY INDUCED AT MORE ACIDIC PH VALUES.
-i- SIMILARITY: Belongs to the GAS1 family.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-97459694; PubMed-9315654;
Muchlachiegel F.A., Fonzi W.A.
PERRZ of Candida albicans encodes a functional homolog of the
regulated gene PHR1 with an inverted pattern of pH-dependent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 11, DB 1; Length 546; Pred. No. 0.0091; 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                    15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
28 responsive protein 2 precursor (pH-regulated protein 2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            951EE0DB9489CED6 CRC64;
                                                                                                                                                                                                                                                                                                        546 AA
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                                                                   Mismatches
3.1%; SCUL
100.0%; Pre
0;
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                                                                                                                        335
                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                     pH responsive protein 2 pPHR2.
Candida albicans (Yeast)
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                                                                                                                                                                       183 SSSSSSST 193
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546 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=5476;
                                                                                                                                                                                                                                                                                                          CANAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         POLY-SER.
NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
                                                                                   MLLT3 OR AF9.
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MIL FUSION POINT (IN ACUTE MYELOID LEUKEMIA PATIENY CO). MLL FUSION POINT (IN ACUTE MYELOID LEUKEMIA PATIENT F1).
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Transcription regulation; Activator; Nuclear protein;
                                   01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
            PRT; 568 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RN12_HUMAN STANDARD; PRT; 624 AA. Q9NWW2; Q9YSB9; 16-OCT--2001 (Rel. 40, Created) 16-OCT--2001 (Rel. 40, Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              translocation; Proto-oncogene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POLY-SER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MIM; 159558; -. Cinucleus; TAS. GO; GO:0005534; C:nucleus; TAS. GO; GO:0007048; P:oncogenesis; TAS. InterPro; IPR005033; YEARS. PFam; PF03366; YEATS: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            568 AA; 63367 MW;
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PIR, 139411; 139411.
Genew; HGNC:7136; MLLT3.
MIM, 159558; -..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match
Best Local Similarity 100.
Matches 11; Conservative
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            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                 NCBI TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              466
375
            HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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AF9_HUMAN
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                                                                                                                                       MEDINE-20469411; PubMed=11013082;
Ostendorff H.P., Bossenz M., Mincheva A., Copeland N.G., Gilbert D.J., Jekkins N.A., Lichter P., Bach I.;
"Functional characterization of the gene encoding RLIM, the corepressor of LIM homeodomain transcription factors.";
Genomics 69:120-130(2000).
28-FEB-2003 (Rel. 41, Last annotation update)
RING finger protein 12 (LIM domain interacting RING finger protein)
(RING finger LIM domain-binding protein) (R-LIM) (NY-REN-43 antigen)
RNR12 OR RLIM.
Homo sapiens (Human)
                                                                                                                                                                                                                                                                                  Scanlan M.J., Gordan J.D., Williamson B., Stockert E., Bander N.H., Jongeneel C.V., Gure A.O., Jager D., Jager E., Knuth A., Chen Y.-T.,
                                                                                                                                                                                                                                                                                                                           "Antigens recognized by autologous antibody in patients with renal-
                                                                Eukaryota, Metaraoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MIM; 300779; -.

Og. GO:0017053; C:transcriptional repressor complex; NAS.
GO; GO:0003714; F:transcription co-repressor activity; NAO.
GO; GO:0016481; P:negative regulation of transcription; NAS.
InterPro; IPRO01841; Znf_ring.
FAM; FRO0097; Zf_C3HC4; 1.
SMART; SW00184; RIG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POLY-SER.
S -> C (IN REF. 1).
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Transcription regulation; Zinc-finger.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AJ271670; CAC14228.1; -.
EMBL; AF155109; AAD42875.1; ALT_FRAME.
EMBL; AK001334; BAA91632.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POLY-SER.
                                                                                                                                                                                                                                                       TISSUE-Renal cell carcinoma;
MEDLINE-99438124; PubMed=10508479;
                                                                                                                                                                                                                                                                                                                                           cell carcinoma.";
Int. J. Cancer 83:456-464(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HGNC:13429; RNF12.
                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                 NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DOMAIN
ZN FING
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us-10-041-615-34.oli10.rsp

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EMBL; M84565; AAA73183.1; -.
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                                                                                         DOMAIN
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                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14 X 10 AA TANDEM REPEATS OF [EVIQ]-P-[CDT]-D-[YNW]-P-[PQ]-[QI]-[QP]-[QDN].

1 (APPROXIMATE).

2 (APPROXIMATE).

3 (APPROXIMATE).
                                                                                                                                                                                                                                                   Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Candida.
                                                                         .
                                                                                                                                                                                                                                                                                                      STRAIN=SC3314;
MEDLINE=96198091; PubMed=8626424;
Staab J.F., Ferrer C.A., Sundstrom P.;
"Developmental expression of a tandemly repeated, proline-and glutamine-rich amino acid motif on hyphal surfaces on Candida albicans.";
J. Biol. Chem. 271:6298-6305 (1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Staab J.F., Ferrer C.A., Sundstrom P.R.;
Submitted (JUN-1995) to the EMBL/GenBank/DDBJ databases.
--- FUNCTION: HYPHAL SURFACE ANTIGEN.
---- SUBCELLULAR LOCATION: HYPHAL SURFACE.
---- TISSUE SPECIFICITY: FOUND IN HYPHAL BUT NOT YEAST FORMS.
                                                  3.1%; Score 11; DB 1; Length 624; 100.0%; Pred. No. 0.01; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Sharkey L.L., Saporito-Irwin S.M., Fonzi W.A., submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
134 N -> D (IN REF. 3).
145 YS -> NR (IN REF. 3).
418 Y -> H (IN REF. 3).
68527 MW; DE3ADE09ACACBCF8 CRC64;
                                                                                                                                                                HWP1 CANAL STANDARD; PRT; 634 AA. P46593; 013424; P87019; 01-NOV-1995 (Rel. 32, Created) 01-NOV-1997 (Rel. 35, Last sequence update) 15-UUL-1999 (Rel. 38, Last annotation update) Hyphal will protein 1 (Cell elongation protein 2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; U64206; AAC96368.1; -.
EMBL; AF001978; AAE64014.1; -.
EMBL; U29369; AAC49209.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 1-225 FROM N.A.
                                                                                                                                                                                                                               HWP1 OR ECE2.
Candida albicans (Yeast).
                                                  Query Match
Best Local Similarity 100.
Matches 11, Conservative
                                                                                           324 GSSSSSSSS 334
                                                                                                                 456 GSSSSSSSS 466
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69
81
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101
111
121
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 134 1
144 1
418 4
624 AA;
                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                       NCBI_TaxID=5476;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Repeat; Antigen
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CONFLICT
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-!- FUNCTION: FIBRINOGEN HAS A DOUBLE FUNCTION: YIELDING MONOMERS THAT
POLYMERIZE INTO FIBRIN AND ACTING AS A COFACTOR IN PLATELET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -i- AGGREGATION.

-i- SUBUNT: HEXAME CONTAINING 2 SETS OF 3 NONIDENTICAL CHAINS

(ALPHA, BETA AND GAWAT), LINKED TO EACH OTHER BY DISULFIDE BONDS.

-i- MISCELLANEOUS: CONVERSION OF FIBRINOGEN TO FIBRIN IS TRIGGERED BY THROMBIN, WHICH CLEAVES FIBRINODEPTIDES A AND B FROM ALPHA & BETA CHAINS, AND THUS EXPOSES THE N-TERMINAL POLYMERIZAMION SITES RESPONSIBLE FOR THE FORMATION OF THE SOFT CLOT. THE SOFT CLOT IS CONVERTED INTO THE HARD CLOT BY FACTOR XITIA WHICH CATALYZES THE BESILON-(GAMAR-GLUTDANT)LYSINE CROSS-LINKING BETWEEN GAMARA CHAINS (STRONGER) OF DIFFERENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-FEB-1994 (Rel. 28, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
15-SEP-2003 (Rel. 42, Last annotation update)
Fibrinogen alpha-2 chain precursor [Contains: Pibrinopeptide A].
Petromyzon marinus (Sea lamprey).
Bukaryota; Mecazoa; Chordata; Craniata; Vertebrata; Hyperoartia;
Petromyzontiformes; Petromyzontidae; Petromyzon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=92196058; PubMed=1549566;
Pan Y., Doolattele R.F.;
"cDNA sequence of a second fibrinogen alpha chain in lamprey: an
archetypal version alignable with full-length beta and gamma
                                                                                                                                                                                                                                                                                                                                                                                                   Score 11; DB 1; Length 634;
Pred. No. 0.01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
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                                                                                                                                                                                                                                                                        D -> DVPCDNPPQPD (IN REF. 2)

S -> P (IN REF. 2).

S -> P (IN REF. 2).

P -> S (IN REF. 2).

P841347576BA6376 CRC64;
             10.
11.
12 (INCOMPLETE).
13 (INCOMPLETE) POLY-GIA.
POLY-GIA.
POLY-THR.
POLY-THR.
                                                                                                                                                                                                                                                                                                                                                                                       3.1%; Scc. ... 100.0%; Pred. No. ... ... ... 0; Mismatches
                                                                                                                                                                                                                                                        POLY-VAL
                                                                                                                                                                                                                                                                                                                                                              65372 MW;
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Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           325 SSSSSSSST 335
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  SEQUENCE FROM N.A.
TISSUE=Liver;
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Query Match
Best Local Similarity 100.
Matches 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          704 AA;
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127
170
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VARIANT
SEQUENCE
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"Conserved composition of mammalian box H/ACA and box C/D small
nucleolar ribonucleoprotein particles and their interaction with the
common factor Noppl40.",
Mol. Biol. Call 11:567-577(2000).
-i. FUNCTION: RELATED TO NUCLEOLOGENESIS, MAY PLAY A ROLE IN THE
MAINTENANCE OF THE FUNDAMENTAL STRUCTURE OF THE FIBRILLAR CENTER
                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus (Rat).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1995 (Rel. 32, Created)
1-NOV-1995 (Rel. 32, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
Nucleolar phosphoprotein pl30 (Nucleolar 130 kDa protein) (140 kDa nucleolar phosphoprotein) (Noppl40) (Nucleolar and coiled-body Nobcohoprotein 1)
                                                                                                                                                                                                                                                                                N-LINKED (GLCNAC. . .) (POTENTIAL)
N-LINKED (GLCNAC. . .) (POTENTIAL)
N-LINKED (GLCNAC. . .) (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-Liver;
MEDILE=293242; PubMed=1623516;
Medier U.T., Blobel G.;
"Nopp140 shuttles on tracks between nucleolus and cytoplasm.";
                                                                                 FIBRINOPEPTIDE A (BY SIMILARITY)
                                                                                                                                STEATHLE.

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).
                                                                                          FIBRINOGEN ALPHA-2 CHAIN.
CLEAVAGE (BY THROMBIN; RELEASE
                                                                                                                                                                                                                                                                                                                                    Length 641;
                                                                                                                                                                                                                           (BY SIMILARITY).
INTERCHAIN (WITH BETA CHAIN)
(BY SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                        0; Indels
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                                                                                                                                                                                                                                                                                                         LINKED (GLCNAC. . .) (PC
CA991A8DD698BFB5 CRC64;
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Pred. No. 0.01;
                                                                                                                FIBRINOPEPTIDE A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    704 AA
                                                                                                                                                                                                                                                                                                                                                         Mismatches
          HSSP; PO2671; 1FZD.
InterPro; IPR0021B1, Fibrinogen_C.
PHEMD; PF00147; Fibrinogen_C; 1.
SMART; SM00186; FBG; 1.
PROSITE; PS00514; FIBRIN_AG C_DOMAIN; 1.
Blood coagulation; Plasma; Signal; Repeat.
SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INTERACTION WITH NOPS AND FIBRILLARIN. MEDLINE=20143579; PubMed=10679015;
                                                                                                                                                                                                                                                                                                                            3.1%; St.
100.0%; Pred
0; M
                                                                                                                                                                                                                                                                                                                 70756 MW;
 EMBL; M84482; AAA49264.1; -.
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Best Local Similarity 1000.
Matches 11, Conservative
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641
32
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45
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                                                                                                                                                        54
                                                                                                                                                                                                                                                                                                                641 AA;
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P41777;
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CHAIN
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AND DENSE FIBRILLAR COMPONENT IN THE NUCLEDLUS. IT HAS INTRINSIC GTPASE AND ATPASE ACTIVITIES. MAY PLAY AN IMPORTANT ROLE IN TRANSCRIPTION CYTALYZED BY RNA POLYMERASE I (BY SIMILARITY). SUBUNIT: INTERACE WITH DKC1/Nap57, Nop5/Nap65 and fibrillarin. SUBCELLULAR LOCATION: SHUTTLES ON CURVILINEAR TRACKS BETWEEN WICLEGOLDS AND CYTOPLASM. THESE TRACKS EXTEND FROM THE DENSE FIBRILLAR COMPONENT OF THE NUCLECLUS ACROSS THE NUCLECOLASM TO A LIMITED NUMBER OF THE NUCLECLUS ACROSS THE NUCLECOLASM TO DEPHOSPHORYLATION ON CK-II AND PKC SITES. NOPP140 IS ONE OF THE MOST PHOSPHORYLATION ON CK-II AND PKC SITES. NOPP140 IS ONE OF THE SIMILARITY: CONTAINS I LISH domain.
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DOMAIN PLO 42

LISH.

DOMAIN 84 570

T x 10 A3 ADDROVED

DOMAIN 84 570
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Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
NCBI_TaxID=10090;
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Pred. No. 0.011;
0; Mismatches 0; Indels
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ACIDIC SERINE CLUSTER 1.
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ACIDIC SERINE CLUSTER 3.
ACIDIC SERINE CLUSTER 4.
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ACIDIC SERINE CLUSTER 7.
ACIDIC SERINE CLUSTER 9.
ACIDIC SERINE CLUSTER 9.
ACIDIC SERINE CLUSTER 9.
ACIDIC SERINE CLUSTER 10.
ACIDIC SERINE CLUSTER 11.
PHOSPHORYLATION (BY CK2).
MISSING (IN NOPP140B)
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28-FEB-2003 (Rel. 41, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Protein C20orf67 homolog.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.1%; Sco...
100.0%; Pred. No. v...
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PIR, B42680; B42680.
INTERPOS, IPR006594; LisH.
INTERPOS, IPR003993; treacle.
PFan, PR05025; SRR40_C, I.
PRINTS; PR01503; TREACLE.
SMART; SM00667; LisH, 1:
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CT67 MOUSE
AC T67 MOUSE
AC 28-FEB-2003
DT 28-FEB-2003
DT 15-SEB-2003
DE Protein C200
GN C200RF67.
OS Mus musculus
OC Bukaryota; Moc Mammalia; Eu
OC Mammalia; Eu
RN (1)
RP SEQUENCE FRC
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DOMAIN
SEQUENCE
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                                                 Astraubberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Riausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Mans G.T., Haich F.K.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Rapleton M., Soarse M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Tonshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Butterfield Y.S.N., Xrzywinski M.I., Skalska U., Smailus D.E.,
Cheneration and initial analysis of more than 15,000 full-length
Proc. Natl. Acad. Sci. U.S.A., 180.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=93086427; PubMed=1453958; Condemine G., Dorel C., Hugouvieux-Cotte-Patrat N., Robert-Baudouy J.; Condemine G., Dorel C., Hugouvieux-Cotte-Patrat N., Robert Bruch Genes involved in the secretion of pectate lyases in Erwinia chrysanthemi are regulated by kdgR.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Erwinia chrysanthemi.
Bacteria, Proteobacteria, Gammaproteobacteria, Enterobacteriales,
Enterobacteriaceae, Pectobacterium.
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01-071-1993 (Rel. 26, Last sequence update)
01-070-1995 (Rel. 32, Last annotation update)
01-08-1995 (Rel. 32, Last annotation update)
01-071-1995 (Rel. 32, Last annotation update)
01-071-1993 (Rectic enzymes)
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Pfam; PRO0397; WW; 1.

PROSITE; PS01159; WW DOMAIN 1; FALSE_NEG.

PROSITE; PS50020; WW DOMAIN 2; 1.

PROSITE; PS50020; WW DOMAIN 2; 1.
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TISSUE=Kidney;
MEDLINE=22388257; PubMed=12477932;
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MGD, MGI:2443858; F730014105Rik.
InterPro; IPR001202; WW_Rsp5_WWP.
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GSQD_ERWCH
ID GSQD_ERWCH STANDARD;
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SEQUENCE
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Thumb W., Auer M., Stingl G., Baumruker T.;

A novel splice variant of the transcription factor Nrfl interacts with the TMFalpha promoter and stimulates transcription.";

Nucleic Acids Res. 26:2291-2297(1998).

-! FUNCTION: THE SHORT ISOFORM INTERACTS WITH THE EXTENDED KAPPA 3 SITE OF THE TWF ALPHA PROMOTER AFTER FC GAMMA RIII STIMULATION AND PARTICIPATES IN THE INDUCTION OF THIS CYTOKINE. THE LONG ISOFORM IS EITHER INACTIVE OR REPRESSES THE TRANSCRIPTIONAL ACTIVATION.
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NFL1 MOUSE

ID NFL1 MOUSE

AC 061985; O70234;

DT 30-MAY-2000 (Rel. 39, Created)

DT 30-MAY-2000 (Rel. 39, Last sequence update)

DT 28-FEB-2003 (Rel. 41, Last annotation update)

DE Nuclear factor erythnoid 2 related factor 1 (NF-E2 related factor 1)

DE (NFE2-related factor 1) (Nuclear factor, erythnoid derived 2, like 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
MOI. Microbiol. 6:3199-3211(1992).

-:- FUNCTION: INVOLVED IN A GENERAL SECRETION PATHWAY (GSP) FOR THE EXPORT OF PROTEINS. REQUIRED FOR THE TRANSLOCATION OF THE MULTIPLE PECTIC ENZYMES.

-:- SUBCELLULAR LOCATION: Outer membrane (Probable).

-:- SIMILARITY: BELONGS TO THE EXED/OUTD/PULD/XPSD FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL SECRETION PATHWAY PROTEIN D. GLY/SER-RICH.
; 156E84CC50CD54FA CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.1%; Score 11; DB 1; Length 710; 100.0%; Pred. No. 0.011; cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         McKie J., Johnstone K., Mattei M.-G., Scambler P., "Cloning and mapping of murine Nfe211.", Genomics 25:716-719(1995).
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MEDLINE=98248571; Pubmed=9580677;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL, X65265; CAA46370.1; --
PIR, S28014; S28014; FR00175; Bac GSPD.
InterPro; IPR004846; GSPII/IIIprotein.
InterPro; IPR004846; GSPII/IIIprotein.
InterPro; IPR005644; NolW-like.
Pfam; PF00263; GSPII III; 1.
Pfam; PF00263; GSPII III; 1.
PRIWES; PR00811; BCTBRIALGSPD.
PRIWES; PR00811; BCTBRIALGSPD.
Transport; Outer membrane; Signal.
SIGNAL
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MEDLINE=95278942; PubMed=7759107;
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76213 MW;
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Best Local Similarity 100.0
...hes 11; Conservative
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710 AA;
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R EMBL; X79709; CAA553621; ---

BREAT; 148694; 1486694.

DR PIR; 148694; 1486694.

DR POSTITE; PS502017; ELZIP.

DR PROSTITE; PS502017; BLZP; I.

DR PROSTITE; PS502017; BLZP; I.

DR PROSTITE; PS502017; BLZP; I.

DR PROSTITE; PS502017; BLZP; I.

DR PROSTITE; PS502017; BLZP; I.

DR PROSTITE; PS502017; BLZP; I.

DRAIN 414 447 ASP/GLU-RICH (ACIDIC).

PT DOMAIN 415 447 ASP/GLU-RICH (ACIDIC).

POWAIN 467 486 POLY-SER

DOMAIN 417 447 ASP/GLU-RICH (ACIDIC).

TOWAIN 467 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 47 486 POLY-SER

DOMAIN 487 500580.

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TOWAIN MISSING RAPE; 2).

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(01454; Q1287; Q5FK6;

15-UTL-1998 (Rel. 36, Last sequence update)

15-UTL-1998 (Rel. 36, Last sequence update)

15-UTL-1998 (Rel. 36, Last sequence update)

15-SEP-2003 (Rel. 42, Last annotation update)

16-SEP-2003 (Rel. 42, Last annotation update)

16-SEP-2003 (Rel. 42, Last annotation update)

16-SEP-2003 (Rel. 42, Last annotation update)

16-SEP-2003 (Rel. 42, Last annotation update)

17-SEP-2003 (Rel. 36, Last annotation update)

18-SEP-2003 (Rel. 42, Last annotation update)

18-SEP-2003 (Rel. 42, Last annotation update)

18-SEP-2003 (Rel. 42, Last annotation update)

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18-SEP-2003 (Rel. 42, Last annotation update)

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18-SEP-2003 (Rel. 42, Last annotation update)

18-SEP-2003 (Rel. 42, Last annotation update)

18-SEP-2003 (Rel. 42
-i- SUBUNIT: HETERODIMER (PROBABLE). IT MAY FORM A HETERODIMER WITH SEVERAL TRANSELITION FACTORS.
-i- SUBCELLULAR LOCATION Nuclear (By similarity).
-i- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (Human).

Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                  Note=No experimental confirmation available; TISSUB SPECIFICITY: Widely expressed. TISSUB DECIFICITY: Widely expressed. PHOSPHOXIATION FOR BINDING. PIM: COULD BE DEPRINGENT ON CKII PHOSPHOXIATION FOR BINDING. SIMILARITY: Belongs to the bZIP family. CNC subfamily.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.1%; Score 11; DB 1; Length 741;
100.0%; Pred. No. 0.012;
ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                              confirmation available;
                                                                                                                                               Event=Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                               Name=Short;
IsoId=Q61985-2; Sequence=VSP_000580, VSP_
'----'
                                                                                                                                                                                                                  Isold=061985-1; Sequence=Displayed;
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SEQUENCE FROM N.A. (ISOFORM 1).
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MEDLINE=89127129; PubMed=2851699;
Hall J., Gilbert H.J.;
Hall J., Gilbert H.J.;
Hall J., Gilbert H.J.;
Hall J., Gilbert H.J.;
Holloctide sequence of a carboxymethylcellulase gene from
Pseudomonas fluorescens subsp. cellulosa.";
Mol. Gen. Genet. 213:112-117(1988)
HOL. Gen. Genet. 213:112-117(1988)
HOL. GATALYTC ACTIVITY: Endohydrolysis of 1,4-beta-D-glucosidic
HIRAGES in cellulose, lichenin and cereal beta-D-glucans.
HYDROLASES)
-:-SIMILARITY: Contains 1 bacterial-type cellulose-binding (CBD)
 PROSITE; PS00036; BZIP_BASIC; 1.
Transcription regulation; Activator; DNA-binding; Nuclear protein;
Alternative splicing.
                                                                                                                                                                                                                                                                                                                                                      01-UUL-1989 (Rel. 11, Created)
01-UUL-1989 (Rel. 11, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Endoglucanase A precursor (EC 3.2.1.4) (Endo-1,4-beta-glucanase)
(Cellulase) (EGA).
                                                                                                                                                                                           ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
Pseudomonadaceae; Pseudomonas.
                                                                                                                                                             Length 772;
                                                                                                                                                          / Match 3.1%; Score 11; DB 1; Length 772 Local Similarity 100.0%; Pred. No. 0.012; nes 11; Conservative 0; Mismatches 0; Indels
                                                                                                  Missing (in isoform 2).
/FTId=VSP 000579.
C868807G6046BEF5 CRC64;
                                             ASP/GLU-RICH (ACIDIC)
                                                           POLY-SER.
BASIC MOTIF.
LEUCINE-ZIPPER.
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InterPro; IPR002883; CBD_5.
InterPro; IPR001701; GlyCo_hydro_9.
InterPro; IPR004197; GlyCo_hydro_9.
InterPro; IPR006197; GlyCo_hydro_919.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF00759; Glyco hydro 9; 1.
PF00801; PKD; 1.
SM00637; CBD II; 1.
SM00089; PKD; 1.
                                                                                                                                   772 AA; 84703 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; X12570; CAA31082.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Pseudomonas fluorescens.
                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                       324 GSSSSSSSS 334
                                                                                                                                                                                                                                                     495 GSSSSSSSSS 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fam; PF02013; CBM 10;
fam; PF00553; CBM 2; 1
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GUNA PSEFL
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DNA BIND
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                                           DOMAIN
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February 19, 2004, 19:35:01; Search time 40 Seconds (without alignments) 2322.473 Million cell updates/sec
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360
1 MIKLGPYFTPPTKIKTKIKD......SETPSITQARGSMFLAEHVV 360
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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                                                                  OM protein - protein search, using sw model
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Gapop 60.0 , Gapext 60.0
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	Ogv684 drosophila Ogwc2 drosophila Ogsu3 drosophila Ogswc2 drosophila Ogwc2 drosophila Ogwc2 drosophila Ogwc2 drosophila Ogwc2 drosophila Ogwc2 cryptospori Ogncr6 cryptospori Ogncr6 cryptospori Ogncr8 cryptospori Ogncr9 cryptospori Ogncr9 cryptospori Ogncr9 cryptospori Ogncr9 cryptospori Ogncr9 cryptospori Ogncr9 cryptospori	O/3451 numan papil
SUMMARIES	09V684 QBMN67 QBMN67 Q9SU13 Q9SWC2 Q9VWC2 Q9VWC0 Q9NCR6 Q9NCR6 Q9NCR8 Q9NCR9 Q9UCR9 Q9UCR9 Q9UCR9	O/3451
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																				-								
OBNOKI	QBNOJI	OBBYSB	OBGYNO	QBCSW6	QBNOIZ	CBNOIL	OBNOHO	QBNOHL	OBNOGE	Q8N0H2	OBNOIO	QBN0G9	QBN013	Q9M0B4	QBNOGB	6H0N8Ö	Q8N0H4	910N8C	OBNOGO	Q8N017	Q8N0K2	98N019	Q9LRJ8	Q8LBR9	Q8N014	QBN015	043454	Q9D6J0
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3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.7	3,1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	н Н	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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ALIGNMENTS

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O1-MAY-2000 (TFEMBLE) 13, Created)

D1 (19/09/864)

O1-MAY-2000 (TFEMBLE) 13, Last sequence update)

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D2 (10-MAY-2000 (TFEMBLE) 13, Last sequence update)

D3 (10-MAY-2000 (TFEMBLE) 12, Last annotation update)

D4 (201169)

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CG32529 OR CG11936 OR CG15619.
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095013
1D 095
AC 095
DT 01-
DT 01-
DE GH1
GN CG3
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Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X., Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D., La Markilov G., Milshina N.V., McDarry C., Morris J., Moshrefi A., Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nalson D.L., Nelson D.R., Nalson K.A., Naskern D.R., Pacleb J.M., Nelson D.R., Pattman G.S., Pan S., Pollard J., Puri V., Reese M.G., Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H., Shue B.C., Siden-Kianos I., Simpson M., Stupski M.P., Smith T., Spier E., Spradling A.C., Stapleton M., Strong R., Sun E., Spier E., Spradling A.C., Turner R., Venter E., Wang A.H., Wang X., Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J., Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A., Wi J., Yeh R.-F., Zaveri J.S., Zhan M., Zhou, X. Zhan S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Zhu S., Z
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Best Local Similarity 100.0%; Pred. No. 0.00015;
Matches 13; Conservative 0; Mismatches 0; Indels
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Dictyostelium discoideum (Slime mold).
Eukaryota; Mycetozoa; Dictyosteliida; Dictyostelium.
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01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-0AR-2003 (TrEMBLrel. 23, Last annotation update)
Hypothetical protein.
Dictyostellum discoideum (Slime mold)
Bukaryota, Mycetozoa, Dictyostellida, Dictyostellum.
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01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-WAR-2003 (TrEMBLrel. 23, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Science 287;2185-2195 (2000).
EMBL; AE003823; AAF58547.1; --
FlyBase; FBgn0033704; CG13169.
SEQUENCE 311 AA; 33572 MW:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        324 GSSSSSSSSTP 336
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Best Local Similarity 100.
Matches 12; Conservative
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DT 01-M
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KR SEQUENCE FROM N.A.

KR SEQUENCE C., Harwood A., Kim H.J., Newell P.C., Gross J.D.;

RA GUO K.A., Anjard C., Harwood A., Kim H.J., Newell P.C., Gross J.D.;

RT "A myb-related protein required for culmination in Dictyostelium.";

RI Development 126:2812-822(1999).

C. -!- SUBCELLULAR LOCATION: NUCLEAR (BY SIMILARITY).

CC -!- SUBCELLULAR LOCATION: MUCLEAR (BY SIMILARITY).

CC -!- SIMILARITY: CONTAINS 3 WYB-LIKE DOMAINS.

DR REMBL, ARF098507; AAG15274.1; -.

DR HSSP; PO66976; 1MBG.

DR INTERPORT: PRO01005; Myb_DNA_binding.

DR Pfan; PR00249; myb_DNA_binding.

DR Pfan; PR00279; MYB_1; 1.

DR PROSITE; PS00097; WYB_1; 1.

DR PROSITE; PS00097; WYB_1; 1.

DR PROSITE; PS00097; WYB_1; 1.

DR PROSITE; PS00097; WYB_1; 1.

CO NA_binding; Nuclear Protein.

CO NA_binding; Nuclear Protein.

CO NA_BINGER SS0090; WYB_3; 2.

CO NA_BINGER SS0090; WYB_3; 66019 WW; F02D9FACB79F3C43 CRC64;
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Schulte U., Aign V., Hoheisel J., Brandt P., Fartmann B., Holland R.,
Nyakatura G., Mewes H.W., Mannhaupt G.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
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Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
Sordariales; Sordariaceae; Neurospora.
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3.3%; Score 12; DB 3; Length 624;
Best Local Similarity 100.0%; Pred. No. 0.0029;
Matches 12; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      German Neurospora genome project;
submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AL807374; CAD37056.1; -.
InterPro; IPR000087; Collagen.
Pfam; PF01391; Collagen; 1.
Hypothetical protein.
SEQUENCE 624 AA; 58999 WW; 713FED5782242E4D9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-WAR-2003 (TrEMBLrel. 23, Last annotation update)
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Last sequence update)
Last annotation update)
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01-OCT-2002 (TYEMBLY 22, CY
01-OCT-2002 (TYEMBLY 22, La
01-MAR-2003 (TYEMBLY 23, La
Hypothetical protein.
B13H18.080.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  146 SSSSSSSSTP 157
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Q9VWC0
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RA Adman N. Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,

RA Adman N. Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,

RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,

RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,

RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,

RA Brandon R.C., Rogers Y.-H.C., Blazej K.G., Chen.L.X.,

RA Brandon R.C., Machard M. An H.-J., Andrews Pfannkoch C., Baldwin D.,

RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,

RA Ballew R.M., Basu A., Berman B.P., Bhandari D., Bolshakov S.,

RA Burtis K.C., Busam D.A., Buller H., Cadieu E., Center A., Chandra I.,

RA Dorkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,

RA Dodson K., Downes M. Dong Z., Mays A.D., Dew I., Dietz S.M.,

RA Dodson K., Downes M., Dong Z., Mays A.D., Dew I., Dietz S.M.,

RA Dodson K., Brangelista C.C., Ferraz C., Ferriera S., Fleischmann W.,

RA Dodson K., Gabrielian A.E., Garg N.S., Gelbart W., Glasser K.,

RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,

RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J. Lai Z.,

RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., Moshrefi A.,

RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,

RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
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                                                                                                                                                                                                                                                                                                                                                             Gaps
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FitterPro; PRO040125; BAH.

SMART; SM00439; BAH; 1.

SWART; SM00439; BAH; 1.

SEQUENCE 967 AA; 105814 MW; 7DFD584521A3DC2A CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CG32529 protein.
CG32529 OR CG11936 OR CG15619.
Drosophila melanogaster (Fruit fly).
Bukaryota, Metazoa, Arthropoda; Hexapoda; Insecta; Pterygota;
Bukaryota, Edopteraygota; Diptera, Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
Drosophila melanogaster (Fruit fly).
Eukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota,
                                 Necotera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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                                                                                                                                                                                                                                                                                                             Score 12; DB 5; Length 90, Pred. No. 0.0043;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NAY-2000 (TrEMBLrel. 13, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
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100.0%; Pred. No. v...
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les 12; Conserv
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                                                                                            SEQUENCE FROM N.A. STRAIN=Berkeley;
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                                            Ephydroidea; Dro
NCBI_TaxID=7227;
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Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M., Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G., Shue B.C., Scheeler F., Shen H., Shue B.C., Scheeler F., Shen H., Spier B.C., Scheeler F., Shen H., Spier B.C., Stadling A.C., Stapleton M., Strong R., Smith T., Spier B., Spradling A.C., Turner R., Venter B., Wang A.H., Wang X., Wang S.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J., Williams S.M., Woodage T., Warley K.C., Wu D., Yang S., Yao Q.A., Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu S., Zhu X., Smith H.O., Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.; The genome sequence of Drosophila melanogaster.";
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Adams M.D., Celniker S.E., Gibbs R.A., Rubin G.M., Venter C.J.;
Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
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100.0%; Pred. No. 0.0054;
ive 0; Mismatches 0; Indels
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01-MAY-2000 (TEMBLE1 13,
01-OCT-2002 (TEMBLE1, 22,
01-WAR-2003 (TEMBLE1, 23,
CG32529 protein.
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RM MININE=20196106; PubMed=10731132;

RM STRAIN=Berkeley;

RA Adams M.D. Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,

RA Adams M.D. Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,

RA Adams M.D. Celniker S.E., Holt R.A., Fabburnen M., Henderson S.N.,

RA Adams M.D., Lewis S.E., Richards S., Ashburnen M., Henderson S.N.,

Bardon R.C., Rogers Y.-H.C., Blazel R.G., Chang Q., Chen L.X.,

RA Adams M.D. Degers D. H.C., Bardel R.G., Change M., Miklos G.L.G.,

RA Abril J.F., Agbayani A., An H.-J., Andrews Flannkoch C., Baldwin D.,

Ballew M. K.H., Doyle C., Baxter E.G., Helt G., Walson C.R., Miklos G.L.G.,

RA Ballew M. Basu A., Baxendale J., Bayaraktaroglu L., Beasley E.M.,

Ballew M. Basu D.A., Burnal B.P., Bhandari D., Bolshakov S.,

RA Burtis K.C., Busam D.A., Buller H., Cadieu E., Center A., Chandra I.,

RA Burtis K.C., Busam D.A., Buller H., Cadieu E., Center A., Chandra I.,

RA Burtis K.C., Busam D.A., Buller H., Cadieu E., Center A., Chandra I.,

RA Cadery J.M., Cawley S., Dahlke C., Davensport L.B., Davise P.,

RA Caderielian A.E. Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,

RA Burtis K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,

RA Harris N.L., Harvey D., Hemian T.J., Hermandez J.R., Houck J.,

RA Jalai M., Kalush F., Karpen G.H., Ke Z., Kulp D., Lai Z.,

Alalai M., Kalush F., Karpen G.H., Ke Z., Kulp D., Lai Z.,

Alalai M., Kalush F., Karpen G.H., Ke Z., Kulp D., Lai Z.,

Alalai M., Moy M., Murphy B., Murphy L., Murany D.M., Nelson D.L.,

RA Adalai M., Patten G. G., Kraft C., Kravitz S., Kulp D., Lai Z.,

Alalai M., Moy M., Murphy B., Murphy L., Murany D.M., Nelson D.L.,

RA Balazzolo M., Pittman G.S., Pan S., Pollad S., Yoo, R.,

Ra Reinert R., Remington K., Saunders R., Venter E., Wang A.H.,

Ra Reinert R., Remington K., Stapleton M., Stupek M., Shun E.,

Spradilan S.M., Woodage T., Worley K.C., Wu D., Yang G., Zheng X.H.,

Ra Harden D.R., Myere R., Wolley R., Minkhy M., Marker J., Walley R., Shun B.,

Ra J., Ra R., Ra R., Ra R., Ra R., Ra R., Shun R
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Revans C.A., Gocayne J.D., Amanatides P.G., Brandon R.C., Rogers Y.,

Banzon J., An H., Baldwin D., Banzon J., Beeson K.Y., Busam D.A.,

Carlson J.W., Center A., Champe M., Davenport L.B., Dietz S.M.,

Dodson K., Dorsett V., Doup L.E., Doyle C., Dresnek D., Farfan D.,

Rerriera S., Frise E., Galle R.F., Gargy N.S., George R.A.,

Gonzalez M., Houck J., Hoskins R.A., Hostin D., Howland T.J.,

Ibegwam C., Jalali M., Kruse D., Li P., Mattei B., Moshrefi A.,

McIntosh T.C., Moy M., Murphy B., Nelson C., Melson K.A., Nunco J.,

Pacleb J., Paragas V., Park S., Patel S., Ffeiffer B.,

Phouanenavong S., Pittman G.S., Puri V., Richards S., Scheeler F.,

Williams S.M., Zaveri J.S., Smith H.O., Venter J.C., Rubin G.M.;

Sequencing of Drosophila melanogaster genome.",

Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Misra S., Crosby M.A., Matthews B.B., Bayraktaroglu L., Campbell K. Hradecky P., Huang Y., Kaminker J.S., Prochnik S.E., Smith C.D., Tupy J.L., Bergman C., Berman B., Carlson J.W., Celniker S.E., Canp M., Drysdale R., Emmert D., Frise E., de Grey A., Harris N., Kronmiller B., Marshall B., Millburn G., Richter J., Russo S., Searle S.M.J., Smith E., Shu S., Smutniak F., Whitfield E.,
       Drosophila melanogaster (Fruit fly).
Eukaryota, Metazoa, Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
NCBI_TaxID=7227;
   CG32529 OR CG11936 OR CG15619.
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Ashburner M., Gelbart W.W., Rubin G.M., Mungall C.J., Lewis S.E., "Annotation of Drosophila melanogaster genome.";
Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                        Adams M.D., Celniker S.E., Gibbs R.A., Rubin G.M., Venter C.J., submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
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100.0%; Pred. No. 0.0098;
ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                   SMART; SM00439; BAH; 1.
SEQUENCE 2529 AA; 270675 MW; C93B1726BE7547D4 CRC64;
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01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2002 (TrEMBLrel. 22, Last annotation update)
15 ADA glycoprotein gpl5 (Fragment).
Cryptosporidium parvum.
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
Cryptosporidiidae; Cryptosporidium.
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01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2002 (TrEMBLrel. 22, Last annotation update)
Gp15 antigen (Fragment).
Cryptosporidium parvum.
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
                                                                                                                                                                                                                                   FlyBase;
Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     50 50 50 50 50 50 AA; 4705 MW; D87D5DFE8811C421 CRC64;
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Pred. No. 0.0035;
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100.0%; Bred
0; M
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Flydase; FBGN005259; CG32529.
Interpro; IPR000104; Antifreeze_1.
Interpro; IPR001025; BAH.
PRINTS; PR00308; ANTIFREEZEI.
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es 11; Conserv
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NON TER
SEQUENCE
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Q9NCR6;
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STRAIN-HS2,
MEDLINE=2031640; PubMed=10858229;
MEDLINE=2031640; PubMed=10858229;
Strong W.B., Gut J., Nelson R.G.;
"Cloning and sequence analysis of a highly polymorphic Cryptosporidium cloning and sequence analysis of a highly polymorphic Cryptosporidium per encoding a 60-kilodaltcn glycoprotein and characterization of its 15- and 45-kilodalton zoite surface antigen products.";
Infect. Immun. 68-4117-4134 (2000).
BNBL; AP178694; AAF81968-1; --
NON_TER 1
NON_TER 107
SEQÜENCE 107 AA; 10273 MW; 95AACDEF8536673A CRC64;
                                                                                              Strong W.B., Gut J., Nelson R.G.;
"Cloning and sequence analysis of a highly polymorphic Cryptosporidium parvum gene encoding a 60-kilodalton glycoprotein and characterization of its 15- and 45-kilodalton zoite surface antigen products.";
EMBL; AF178695; AAF81989.1; -.
EMBL; AF178695; AAF81989.1; -.
NON TER 104 104
SEQÜENCE 104 AA, 9926 MW; 3461036523B53C2F CRC64;
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Eukaryota, Metazoa, Nematoda, Chromadorea, Rhabditida, Rhabditoidea,
Rhabditidae, Peloderinae, Caenorhabditis.
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100.0%; Pred. No. 0.0065;
ive 0; Mismatches 0; Indels
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100.0%; Pred. No. 0.0067;
iive 0; Mismatches 0; Indels
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Cryptosporidiidae; Cryptosporidium.
NCBI_TaxID=5807;
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
01-OCT-2002 (Fragment).
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
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                                        STRAIN=HGM07;
MEDLINE=20316040; PubMed=10858229;
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Best Local Similarity 100.
Matches 11; Conservative
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Best Local Similarity 100.
Matches 11; Conservative
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Y46G5A.20.
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            SEQUENCE FROM N.A.
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Q9NCR9
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Q9U2E9
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EMBL; AF178693; AAF81987.1; -.
                                                                                                                                                           STRAIN=HGMI0;

MEDLINE=20316040; PubMed=10858229;

Strong W.B., Gut J., Nelson R.G.;

"Cloning and sequence analysis of a highly polymorphic Cryptosporidium parvum gene encoding a 60-kilodalton glycoprotein and characterization of its 15- and 45-kilodalton zoite surface antigen products.";

EMBL; AR178697; AAF81991.1; -.

BML; AR178697; AAF81991.1; -.

NON_TER 59 59

SEQÜENCE 59 AA; 5742 MW; D9173B91CB482AA3 CRC64;
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Pred. No. 0.0045;
O. Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.1%; Score 11; DB 5; Length 59; 100.0%; Pred. No. 0.004; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2002 (TrEMBLrel. 22, Last annotation update)
01-0CT-2002 (TrEMBLrel. 22, Last annotation update)
GDIS antigen (Fragment)
Cryptosporidium parvum.
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
Cryptosporidiidae; Cryptosporidium.
0121 TaxID=5807;
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Cryptosporidium parvum.
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida;
Cryptosporidiidae; Cryptosporidium.
NCBI_TaxID=5807;
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59 AA; 5742 MW; D9173B91CB482AA3 CRC64;
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Last sequence update)
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100.0%; Pred. No. co.
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Cryptosporidiidae; Cryptosporidium.
NCBI_TaxID=5807;
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MEDLINE=20316040; PubMed=10858229;
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Best Local Similarity
Local 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100
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                                                                                                                          SEQUENCE FROM N.A.
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NCBI_TaxID=1718;
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100.0%; Pred. No. 0.008;
tive 0; Mismatches 0; Indels
                                                                                                                        "Genome sequence of the nematode C.elegans: A platform for investigating biology."; Science 283:2012-2018(1998). BELL, ALI10485; CAB60362.1; WormPep, Y46G5A.20; CE24293. SEQUENCE 109 AA; 11493 MW; 124002FF2443810F CRC64;
                                                                                                                                                                                                                                                                                                       3.1%; Score 11; DB 5; Length 109; 100.0%; Pred. No. 0.0068; tive 0; Mismatches 0; Indels
Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases
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01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
CGL1393
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01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2002 (TrEMBLrel. 22, Last annotation update)
Gp15 antigen (Fragment).
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STRAIN=ATCC 13032 / DSM 20300 / NCIB 10025;
Nakagawa S.;
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MEDLINE=99069613; PubMed=9851916;
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Matches 11; Conservative
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RT "Complete genomic sequence of Corynebacterium glutamicum ATCC 13032.";

RI Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.

DR EMBL; APO05278; BAB99786.1; -

KW Hypothetical protein; Complete proteome.

SQ SEQUENCE 134 AA; 13002 MW; DA00A9CCF281E271 CRC64;

Query Match

Best Local Similarity 100.0%; Pred. No. 0.0081;

Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 325 SSSSSSSST 335

Qy 325 SSSSSSSST 52

Cy 325 SSSSSSSST 52

Search completed: February 19, 2004, 19:38:43

Job time: 43 secs
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